Consumer Location Based Service Perceptions and Response: a focus on Location Based Services and Emerging Mobile Lifestyles

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Abstract

Location Based Services (LBS) and electronically mediated lifestyles (e-lifestyles) represent emergent new areas with approaches (e.g. apps and e-activities) billed to change customer experiences and responses. Marketers are confronted with a challenge of understanding how consumers engage with mobile services and how to design appropriate strategies towards that (Donovan, 2013). A review of extant literature has indicated that the implementation of marketing strategies based on LBS is still in its infancy, and yet to gain widespread acceptance by consumers. The role of individual differences in consumer response to LBS is not reported in any substantive way in the literature- yet we know that e-lifestyles are now shaping different consumer responses to LBS. This PhD addresses this important area, with a focus on the role of e-lifestyles in consumer response to location-based services.

The study relied on a sequential multimethod qualitative method of enquiry. Initially, in the first phase of data collection, relevant LBS websites were observed over a three-month period to explore consumer familiarity, attitudes and experience, offering some rich insights into consumer LBS awareness. In phase two of the research, specialist interviews (thirty-eight in total) were used in conjunction with cartoon tests as an effective way to establish the role of e-lifestyles, situational decision making as well as capturing actual (typical) consumer response in LBS encounters. In phase three, three focus groups were conducted with different user groups (young students, young professionals and older established working participants with families) to examine the role of individual factors in consumer LBS response.

Findings in the study point to good experience with LBS with some selective engagement depending on user group profile, which broke down into 'Involved', 'Observer' or 'Transaction' orientations. Phase two (innovative cartoon tests) led to findings that mapped actual consumer response pathways in simulated encounters- four response pathways unique to this study emerged (immediate, delayed/future response, socially-mediated response and indifference). Findings also point towards influential individual factors such as variation on the basis of life stage, distinct patterns of proactivity and reactivity to LBS messages and the importance of situational factors on the nature of LBS response.

This study contributes to the body of knowledge on LBS and e-lifestyles theory by providing deeper insights on actual consumer response process in typical LBS encounters (e.g. the UK context). It adds fresh insights into typical response processes by using specialist scenarios reflective of typical LBS encounters to map key response pathways, capturing 'live' customer experiences of different forms of LBS and interrogating the rationale behind individual responses using LBS scenarios. Findings also offer a clearer classification of customer response types (e.g. proactive and self-referencing LBS; reactive and cross-referencing LBS). By combining situational context, e-lifestyle and individual attributes influencing individual response to LBS in a single study, this research takes forward the argument of Weiss (2013) on the need for more in-depth examination of consumer response to LBS and takes further previous LBS adoption studies (Zhou, 2012).

Acknowledgements

"Only a strong tree can stand alone"

(Glasow)

Upon reflecting on the above quote, I realised the importance of family, colleagues, and academics as I started my PhD. Despite the drive and ambition to succeed, I realise that completing this PhD would not have been possible if not for the overwhelming support of 'my community'. Firstly, I would like to thank God for allowing me to live and see the completion of this Thesis. As rightly said by David, *"For the LORD God is a sun and shield: the LORD will give grace and glory: no good thing will he withhold from them that walk uprightly."*[1] Secondly, I dedicate this thesis to my wife Nozipho and children; Chantelle, Sean, and Shalom who have supported me throughout this journey. Thank you all for your love and patience throughout this journey. You played a pivotal role in this journey and without you I would never have had the strength to continue. Thirdly, I would like to thank my late grandparents (Samson Matarirano Giwa and Faina Giwa) who looked after me since I was six months old, educated me and believed in me despite my weaknesses. I truly love you so much and wish you could be here… I am forever grateful and inspired by your hard work and dedication. This Thesis is dedicated to you all and my mother Anna Ruswa who passed on to glory on 9th May 2017. Fourthly, sincere gratitude goes to my supervisors' Dr Anne Broderick and Dr Suha Omar. Thank you so much for all your support, guidance and believing in me against all odds. Without your dedication and constant support, I wouldn't be where I am today… you inspired me, and were patient throughout. I am forever grateful. Thank you! I would also like to thank my church community (Leicester Tabernacle) especially Bro Johannes and Sister Marcia Matare who supported me through this journey as well as a dear colleague and friend; Dr Deviraj Gill. I wish to salute De Montfort University for the valuable High Flyers scholarship as well as funding for conferences. Finally, I acknowledge all participants who made themselves available for interviews. Without your support and cooperation, this project would not have been realised. Thank you all!

[1] A Psalm of David in the Holy Bible King James Version

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List of Abbreviations

AIPO	Activities Interests and Opinion
Cell-ID	Cell identification
E- actions	Electronically Mediated Actions
E-interests	Electronically Mediated Interests
E-lifestyles	Electronically Mediated Lifestyles
E- opinions	Electronically Mediated opinions
E- values	Electronically Mediated values
GPS	Global Positioning System
IDT	Innovation Diffusion Theory
Instaviduals	Individuals who move between segments
ICT	Information Communication Technology
IT	Information Technology
LBA	Location Based Advertising
LBS	Location Based Services
LBSN	Location Based Social Networking
LCFC	Leicester City Football Club
LOV	List of Values
M- Lifestyle	Mobile Lifestyle
MM	Mobile Marketing
MMA	Mobile Marketing Association
TAM	Technology Adoption Model
TPB	Theory of Planned Behavior
Transumers	Consumers using mobile services in transit
UTAUT	Unified Theory of Acceptance and Use of Technology
RFID	Radio Frequency Identification technology
RVS	Rokeach Value Scales
VALS	Values and Lifestyles
Wi-Fi	Wireless Fidelity

Chapter 1

Research Introduction

1. Introduction

This thesis examines consumer perceptions and response to location based services (LBS) and emerging mobile lifestyles. The aim of this chapter is to provide an overview of the entire thesis. Section 1.1 provides a background and rationale of the study highlighting developments in LBS and lifestyle literature as well as challenges in mapping consumer response. Section 1.2 outlines aims and objectives of the study followed by an overview of thesis chapters in section 1.3. Lastly, section 1.4 provides an indication of potential contributions from this study.

1.1 Background and Rationale of Study

This section provides a background to this study starting with a brief outline of the development of LBS in Section 1.1.1. This is followed in Section 1.1.2 by an outline of the theoretical focus of the study in two areas- LBS theory and lifestyle theory.

1.1.1 Overview of LBS Development

Location based services (LBS) date back to 2001 when location tracking functions were introduced in Japan (Dhar and Varshney, 2011). Ratti and Frenchman (2006, cited in Zhou, 2012) define LBS as comprising a 'set of applications that use the geographical position of a mobile device to provide services tailored to that information. Typical LBS functions are navigation, emergency evacuation, directory services, and entertainment, Location Based Advertising (LBA) and location check-in services (Zhou, 2012; Dhar and Varshney: in ACM report, (May 2011). In the UK, LBS have been used extensively in the justice system where released prisoners are tagged to monitor their movements (Thomas, Little, Briggs, McInnes, Jones, and Nicholson, 2013). The nature of LBS is such that users are provided with tailored context and location specific information using wireless technologies (Global Positioning System [GPS], cell-ID and wireless technology [Wi-Fi]; Dhār and Varshney, 2011). Marketers now track their customers in innovative ways, providing new means with which to reach

smaller segments with tailored messages based on location (Stewart and Pavlov, 2002; cited in Yousif, 2012) and research points to the increased relevance of mobile advertising where contextual behavioral segmentation can be used effectively (Anderson, 2013). Sector-specific apps and social platforms such as Foursquare, Shopkick, Gowalla, SCVNGR and Geoloqi now use geo-fencing to alert customers to promotions near their locality (Orange, 2011; Zhou, 2012).

LBS matches with mobile lifestyles- consumers want to be socially connected; they use smart mobile devices in versatile ways. A mobile audience insight report by Forrester (2013) indicated that 34% of customers had used their mobile device to research products in-store. In addition, the convergence of LBS technology, tailored apps and mobile device multi-functionality offers marketers the opportunity to tap into this mobile lifestyle by developing more sophisticated mobile-oriented marketing techniques that can empower customers. Mobile phones are a means of social connection (e.g. via social media) and a means of sharing information and shopping experiences (Lopez-Nicolas, Molina-Castillo and Bouwman, 2008). Mobile advertising has been found to positively influence consumer perceptions of a new service (Bauer et al, 2005; Persaud et al, 2012).

1.1.2 Theoretical Development

1.1.2.1 Focus on Lifestyle Theory

The study of lifestyles spans more than five decades and the lifestyle concept is derived from the fields of psychology and sociology (Yu, Li and Chantatub, 2015). Generally, lifestyle is attributed to the pioneering works of Lazer (1963), Wells and Tigert (1971), Plummer (1974), Gutman (1982) and Mitchell (1983). The analysis of lifestyle theory in this study provides a snapshot into the influence of lifestyle in consumer behaviour studies. Conceptually, the lifestyle concept has multiple uses – in marketing, it provides insight into consumers' daily wants (Solomon, Bamossy, Askegard and Hogg, 2013). A review of lifestyle literature in this thesis has resulted in a fourfold classification of lifestyle studies (See section 2.5.2.1), ranging from studies that have extended pioneering concepts of lifestyle (e.g. Kim, Park and Moon, 2001; Swinyard and Smith, 2003 and Yang et al., 2004) to those engaged in a cross cultural analysis (e.g. Brengman et al., 2005 and Zhu, Wang, Yan and Wu, 2009), to those that have

shifted focus to scale construction (e.g. Yu, 2011) and to scale validation (Chiu, Kim, Lee and Won 2014).

The impact of technology on consumer daily lives is undisputed; Hur, Kim and Park (2010, p.302) acknowledged the mediating role of lifestyle in most consumer purchase and usage decisions. For example, the internet (i.e. availability, anywhere anytime via Wi-Fi) has dramatically changed consumer lifestyles; consumers now spend a great amount of their time on the internet socializing, reading news, purchasing products or services, among other activities (Lee, Lim, Jolly and Lee 2009). This digital revolution has led to a switch from traditional lifestyle thinking (e.g. routine engagement in offline activities such as offline shopping, sports; and the Activities Interests and Opinion- AIO framework by Wells and Tigert, 1971) to academic dimensions that capture on e-lifestyles (e.g. online shopping, socializing and entertainment in transit/between places). Some elements in recent lifestyle studies are congruent with foundations of early lifestyle studies (e.g. Lazer, 1963; Wells and Tigert, 1971; Plummer, 1974; Gutman, 1982; Mitchell, 1983). However, the efficacy of traditional lifestyle measures (e.g. AIO, RVS and LOV) in measuring emerging lifestyles impacted by developments in technology is heavily debated (Yu, 2011; Le et al., 2009).

Less studies have explored emerging lifestyles, according to Bruner II and Kumar, (2007, p.3). Some adapted dimensions of e-lifestyle (Yu, 2011) are useable in this research but Caddy (2016) has highlighted the complexity in changing consumer habits (e.g. transumers- Galletley, 2016) resulting from the convergence of location, lifestyle and LBS (e.g. apps). This challenges our thinking on how to capture the essence of lifestyle for consumers.

This study was informed by themes from previous lifestyle studies. This research also draws on attitude constructs from the Unified Theory of Acceptance of Technology idea (Venkatesh, Morris, Davis and Davis 2003). Like other adoption theories, this has been widely used in contexts to explore individual attitudes towards innovation such as new technology. This PhD research is not however, exploring adoption of technology per se; but how emerging lifestyles influence consumer response to LBS. One contemporary LBS study (e.g. Yu et al., 2015) has adopted an adapted e-lifestyle scale (e-Activities, e-Interests, e-Opinions and e-Values) by Yu (2011) as a point of reference for researching emerging lifestyles. Yu (2011) advocated use of combined lifestyle scales for a more reflective account of emerging lifestyles and the adapted

e-lifestyles framework (Table 2.5, section 2.5.2.4) potentially sheds some light into emerging lifestyles and how they might affect LBS response.

1.1.2.2 Challenges in Mapping Consumer Response to LBS

LBS represent an emergent new area with the capacity to transform the retail landscape and change customer experiences. The growth of the mobile device has revolutionized the way consumers communicate and access retail products. Nonetheless, one key challenge for marketers is to fully understand how consumers engage with mobile services and how to tailor appropriate strategies towards that (See Donovan, 2013). In addition, the implementation of marketing strategies based on LBS is still in its infancy, and yet to gain widespread acceptance (Yu et al, 2010; Zhou, 2012; Weiss, 2013). Vernali and Toker (2010) point to inconsistencies as well as a lack of agreement on the importance of location based services adoption.

As previously stated, LBS represent a critical emergent aspect of marketing theory and practice (Zhou, 2012). We see how key areas of focus in previous mobile marketing research included an analysis of short message advertising, (Varnali and Toker, 2010); the usage of new apps on the smartphone (Weiss, 2013); and focus on user knowledge, privacy concerns and decision making (Xu, Luo, 2011; Smit, Van Noort and Voorveld, 2013; Pescher, Reichhart and Spann, 2014).

Nonetheless, noteworthy from previous studies is the separate approach adopted when researching LBS and lifestyles. Much extant LBS research (e.g. Carroll, Barnes, Scornavacca and Fletcher, 2007; Varnali and Toker, 2010; Shankar et al., 2010) adopted technology adoption lenses when studying LBS. Hur et al., (2010) acknowledged the pivotal role of lifestyles in mobile consumer response. As such, there is limited understanding of a) actual LBS consumer response patterns and b) the role of emerging lifestyles in influencing such patterns. In addressing these challenges, this research will adopt an approach that looks synchronously at emergent lifestyles and how they might inform LBS. It seeks to gather evidence in three ways:

a) by taking a different perspective, focusing on consumer perceptions towards LBS and the role of emerging mobile lifestyles and examining the role of e-lifestyles in consumer response (per recommendations of Weiss, 2013). This takes further the work of Hur et al (2010);

b) by exploring the role of situational context in consumer response (e.g. when, where, with whom and what LBS to target consumers with)

c) by identifying consumer response patterns, this study can map consumer response pathways in typical LBS encounters.

Thus, a synchronous study into LBS and consumer lifestyle to explore actual ('near real') consumer response is adopted in this study.

1.2 Research Aims, Key Questions and Objectives

The principal aim of this research is to explore consumer attitudes towards LBS and identifying the role of emerging lifestyles (consumer lifestyle and mobile lifestyle) in shaping behavioural responses. As such the research questions re as follows:

1. What are current consumer attitudes and familiarity towards Location Based Services in the UK?
2. What is the range of LBS experience across different customer groups?
3. What role, if any, do lifestyles and situational context have on individual consumer response to LBS?
4. How do consumers respond in typical LBS encounters?
5. What individual characteristics might link to individual behavioural response towards LBS (e.g. perceptions of value and risk, life stage and family life cycles etc.)?

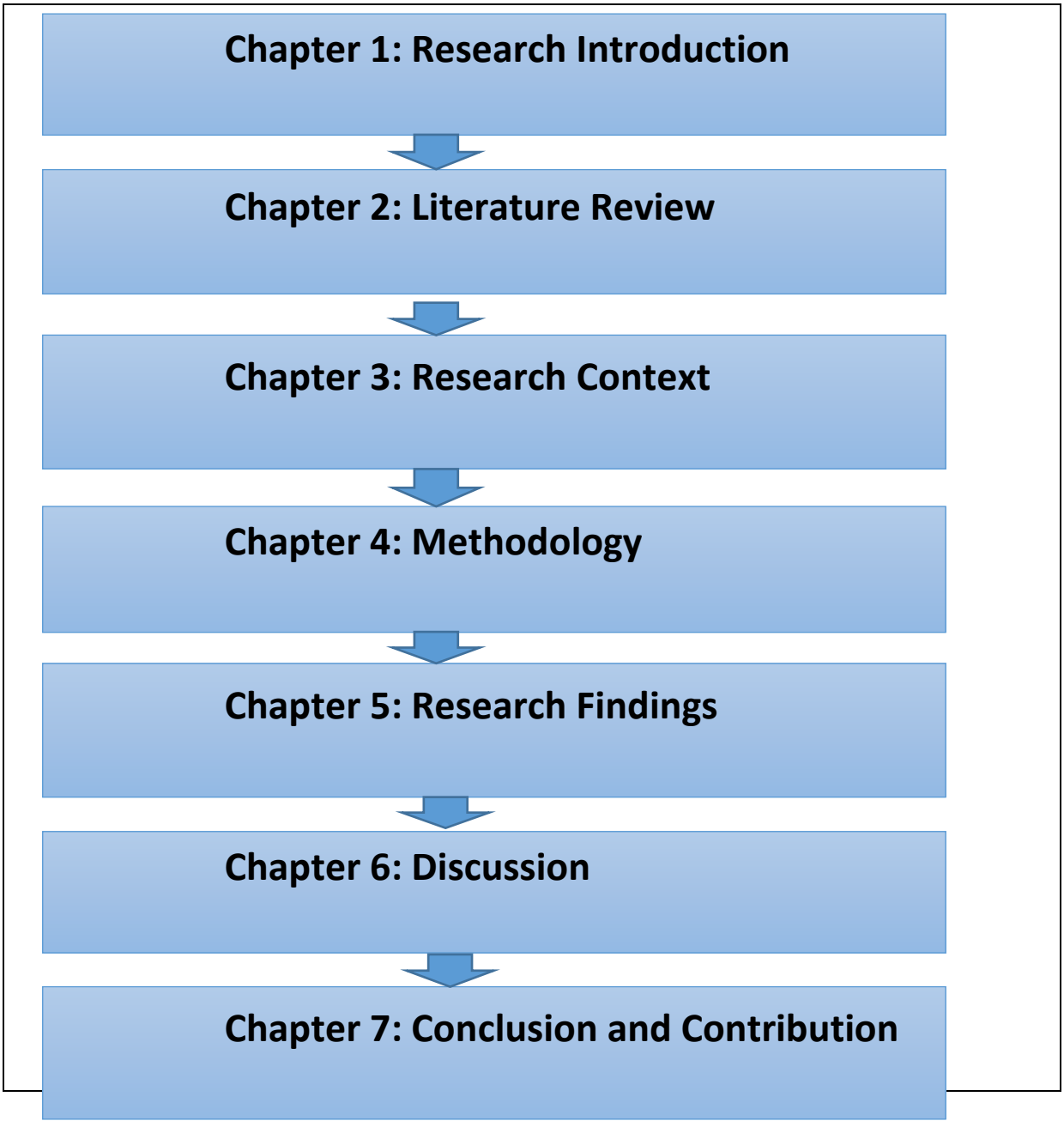
Taking consideration of the above research aims and questions, the research objectives of this PhD research are:

1. To investigate consumer familiarity and attitudes towards UK location based services.
2. To explore current UK consumer experiences with location-based services.
3. To uncover how e-lifestyles and situational context may influence individual consumer response to LBS.
4. To investigate actual consumer response patterns (response process) in LBS encounters.
5. To examine how respondent perceptions of value and individual factors (e.g. life stage and family life cycles) influence consumer response to LBS.

1.3 Organization of Chapters in Thesis

Figure 1.1 below provides an outline of the organization of chapters in this thesis.

Figure 1:1 Thesis Outline



1.3.1 Chapter 2: Literature Review

A review of literature is provided in chapter two by exploring extant research on lifestyles as well as providing a contextual overview of the study. Thus, a review and identification of key lifestyle theories and perspectives is offered. This chapter provides a timeline in the development of lifestyle, e-lifestyle, mobile and wired lifestyles. A critical review of extant e-lifestyle dimensions is presented followed by an outline of elements taken forward in this study.

1.3.2 Chapter 3: Research Context

This chapter presents a contextual overview of LBS, outlining the evolution of the mobile industry (i.e. mobile device-smart devices) which provide the necessary supporting infrastructure (center for LBS delivery) for the delivery and receipt of LBS. Therefore, chapter three explores LBS developments, opportunities, applications and challenges. In addition, key trends in LBS literature are highlighted followed by theoretical perspectives on LBS. Lastly; a conceptual framework that jointly explores LBS and e-lifestyles is presented.

1.3.3 Chapter 4: Methodology

Chapter four sets out and justifies the methodology used in guiding the collection and analysis of data. First, the philosophy guiding this study (interpretivist) is presented and justified followed by a statement of aims and objectives. This is then followed by a justification of the chosen research design (sequential multi method approach) and the choice of a qualitative inquiry. Following on, the methods of data collection for the three research phases are justified as well as outlining the pivotal role of sampling. The data analysis process is then highlighted followed by a statement on ethical implications of the chosen research methods. The chapter concludes with a critique of how validity and reliability issues are addressed in this thesis.

1.3.4 Chapter 5: Research Findings from Three Research Phases

This chapter presents results of this study in three parts. The first section presents findings from phase one online observations which is linked to research objectives one and two. Thus section 5.1 reports on consumer familiarity, attitudes and experiences with LBS. Findings indicate relatively high levels of awareness and experience with LBS in the UK context. In addition, challenging attitudinal factors in LBS encounters were highlighted. Phases two of the study presents results from the specialist interviews (cartoon tests) and follow up in-depth interviews. This phase was linked to research objectives there and four where the focus was on establishing typical response patterns (response process) and the role of e-lifestyle and situational context in individual responses. Phase two findings mapped various consumer response pathways as well as identifying e-lifestyle attributes in consumer responses. Implications of phase two findings on the follow up phase (phase three- semi-structured interviews) were also highlighted. Lastly, phase three findings are presented, highlighting the role of consumer perceptions (value and risk) as well as individual factors in response to LBS (research objective five). Thus, this phase sought to generate debate and discussion on LBS (i.e. familiarity, attitudes and experiences), ascertain the role of consumer perceptions and individual factors in response. It was therefore expected that this phase will triangulate findings from earlier research phases as part of a sequential multi-method strategy. This thesis provides deeper insight on these themes which are directly linked to research objectives and extant literature. Lastly, chapter six concludes with an outline of a preliminary conceptual framework on contemporary LBS response. Therefore, this chapter emphasis the role of factors influencing LBS response (e.g. individual attributes LBS attributes, situational decision making and brand knowledge) and defines the customer response process.

1.3.5 Chapter 6: Discussion

Chapter five discusses research findings from this study and compares these with previous research and theory. Thus, discussion evolves around key research themes drawn from both literature and research findings. The chapter discusses current awareness and varied experience levels in a UK context, individual attributes and variations in customer response pathways.

1.3.6 Chapter 7: Conclusion and Contribution

In chapter seven, study conclusions and contributions to theory and practice are highlighted followed by an outline of study limitations and future research directions. The chapter first outlines how objectives of this study have been met in this Thesis by reflecting on research findings from chapter five. Secondly, the chapter presents three research contributions to the body of knowledge on LBS and e-lifestyles. Thus, key contributions center on customer response process (pattern), situational context and individual attributes (and e-lifestyles). In addition, this study offers deeper insights into the role of brand knowledge in consumer response providing vital managerial insights into how future LBS (e.g. apps) in various sectors (e.g. marketing, health and education) can use brand knowledge (e.g. brand name) when designing LBS as well as seeking to generate favorable consumer perceptions towards LBS.

1.4 Potential Contribution of Study

The research seeks to make three contributions to the body of knowledge on LBS and e-lifestyle. Firstly, it is anticipated that this research will clearly map out the role of situational context in decision making in actual LBS encounters. This will potentially extend the work of Zhang et al., 2012). Second, mapping customer response patterns (process) in actual LBS encounters can offer more in-depth insights into LBS response patterns. Third, this study could help define the role of individual attributes in consumer response to LBS. We have also seen how extant research (e.g. Yu, 2011; Zhou, 2012) focus on LBS and lifestyles separately. Therefore, there is scope to generate fresh and holistic insights into consumer response by jointly addressing LBS and e-lifestyle factors as recommended by Weiss (2013).

Chapter 2

Literature Review

Figure 2.1: Literature Review Outline

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2.3.2 Lifestyle concept in consumer Behaviour
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2.0 Introduction

This chapter offers a detailed overview of literature on lifestyles (Figure 2.1), highlighting key theories and concepts as well as emerging trends in lifestyles.

2.1 Structure of Chapter

This section offers a review and identification of key lifestyle theories and perspectives that will aid development of a conceptual framework for this study. The review starts by outlining the literature review strategy in Section 2.2 followed by definitions of lifestyle in Sections 2.3 and 2.3.1. Section 2.3.2 focuses on relevance of the lifestyle concept in the study of consumer behaviour and adoption of products and services. In addition, the section offers a critical analysis of key lifestyle definitions showing the lack of agreement on an operational definition. Next, Section 2.4 analyses the chronological development of the lifestyle concept providing a depth overview of key frameworks on lifestyles. Section 2.5 provides e-lifestyle definitions. This is followed by Section 2.6 that introduces contemporary lifestyles (e-lifestyles) and significant e-lifestyle studies. Furthermore, the last section (2.7) will clearly demonstrate how consumer lifestyles have changed from the 1950s to present: rationale for revisiting the subject of lifestyles impacted by *'mobile'* technology in this study. Next, section 2.8 provides a rationale for lifestyle and e-lifestyle research.

2.2 Literature Review Strategy

A systematic review strategy of literature search was adopted; Denscombe (2014, p.133) defines systematic review as a thorough and unbiased overview of all research that has been conducted on the topic. In terms of benefits, Tranfield, Denyer, and Smart, (2003, p.220) state that, *"...systematic review helps develop a reliable knowledge base by accumulating knowledge from a range of studies."* Similarly, Denscombe (2014) credits systematic reviews for being credible and offering practical value (answers to questions). A caveat, a systematic literature review may not be suitable early on where limited research is available in a subject area (Okoli and Schabram, 2010). In addition, systematic reviews may not be applicable for use in social research where trials and comparisons are required (Denscombe, 2014). Given

that this study is not conducting trials or comparisons and that a sizeable body of research is available on lifestyles, LBS and mobile lifestyles, a systematic strategy is deemed appropriate. Furthermore, the study of lifestyles dates to the 1950s (Hur, Kim and Park, 2010): conducting a census of recent articles (e.g. see Lamarre, Galarneau and Boeck, 2012) is not appropriate as this would exclude key studies from the timeline. Based on this rationale, the main selection focus was keywords (see Table 2.1). This approach enabled the researcher to conduct a chronological analysis of lifestyles considering traditional and contemporary studies.

Table 2.1: Keywords Used in Data Collection

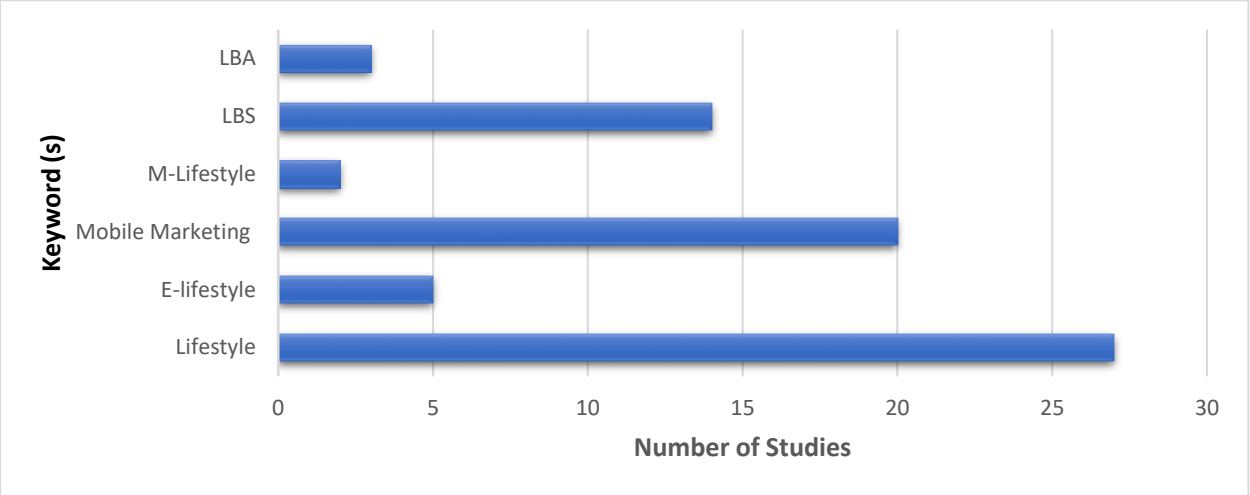
Keyword(s)	Number of Studies	Description
Lifestyle	27	Pioneering studies on traditional lifestyles offering operational definitions and outline of key frameworks (AIO, LOV, RVS, VALS).
Electronic Lifestyle (E-lifestyle)	5	Re-defining lifestyles and scale development and validation.
Mobile Lifestyle (M-Lifestyle)	2	Exploring the role of the mobile device in everyday life and its use anywhere, anytime and at any place (location).
Mobile Marketing	20	Investigating the use of mobile devices to coordinate daily activities (e.g. searching and buying products and services; socialising).
Location Based Services (LBS)	14	Focus on the development of LBS from a government directive to use by business and consumers. Businesses reach consumers with tailored contextual messages and offers tied to their location.
Location Based Advertising (LBA)	3	Addresses the use of mobile devices to reach consumers with tailored messages and offers.

Therefore, the review was conducted in line with Okoli and Schabram (2010) and Denscombe (2014) s' recommendations to use quality academic databases. Thus, extensive search of pertinent Marketing, Psychology, Sociology and Technology databases such as Web of Science, Proquest, JSTOR, Lexis Nexus, EBSCO, Emerald, IEE Xplore, Wiley Inderscience and Science Direct (see Appendix 2). In addition, internet searches were also conducted to locate secondary sources identified in key journals. For the literature analysis, inclusion criteria therefore were any readily available lifestyle, mobile lifestyle and LBS studies published between 1950 and 2015 containing any of the six key words (single or combined) as shown in

Table 1 above. Furthermore, journals that had previously carried out systematic research in the areas linked to the keywords are identified and vetted for relevance. For example, Anderson and Golden (1984) provided a critical review of traditional lifestyle literature: evolution of lifestyle studies as well as the three lifestyle perspectives (Appendix 2). Secondly, Ahmad, Omar and Ramayah (2013) provided an extensive review of traditional and contemporary lifestyle studies (see Appendix 2- Literature Review Outline) demonstrating how lifestyle scales have changed from 1993 to 2009. Furthermore, these studies highlighted key and evolving lifestyle dimensions from both traditional and emerging e -lifestyle measures. The selected journal articles were stored electronically and references tracked using an online reference manager software (Refworks). Analysis of archived electronic sources was done using NVivo qualitative data analysis software to identify key themes and dimensions. Thereafter, literature was classified using: author names/ name of journal, title; dimensions; focus/main findings; limitations and recommendations (see Appendix 2) as recommended by Denscombe (2014). This classification approach helped the researcher in identifying key areas, dimensions as well as research gaps.

2.2.1 Publication Overview

Figure 2.2: Number of Publications by Subject area



Based on search of literature for studies relating to key terms, it is evident from Figure 2.2 that whilst there are plenty of pioneering studies on lifestyles (27 studies) and mobile, marketing

(20 studies); there are relatively few studies on LBS (14), LBA (3), Mobile Lifestyles (M-Lifestyle) [2] and E-lifestyles (5). Despite having less literature on E-Lifestyles, Mobile Lifestyles, LBS and LBA, there appears to be increasing publications per year in these subject areas. Thus, Cheung, Chan and Limayem (2005) see importance of an emerging research area based on the increasing number of yearly publications. What is evident from this literature is that to date, no study has synchronously looked at lifestyles and LBS (Weiss, 2013); few have synchronously addressed mobile applications and LBS (see Pardamean and Susanto, 2012; Karnowski and Jandura, 2014) and E-Lifestyles and Mobile Banking (Yu, Li and Chantatub, 2015). The next sections will address key conceptual studies starting with the lifestyle concept. In this chapter, lifestyle, e-lifestyle and mobile lifestyle factors that may influence response to LBS are explored.

2.3 Lifestyle Concept and Definitions

This section provides an overview of the lifestyle concept in Section 2.3 and then moves on to the definition of lifestyle in 2.3.1. The next section explores different perspectives (e.g. consumer culture and psychology) on lifestyles followed by analysis of key theoretical frameworks and measurement scales. The term lifestyle originated from the fields of psychology and sociology (Yu, Li and Chantatub, 2015) and the lifestyle concept has multiple uses in different disciplines. In modern marketing activities, knowledge of lifestyles provides insight into consumers' daily needs and wants (Solomon, Bamossy, Askegard and Hogg, 2013). Furthermore, the concept provides a means with which to position a product or service in a way that allows a person to pursue a desired way of living (lifestyle). Thus, research on values and lifestyle is guided by the principle of abstraction (Kahle, 1985; Chang and Leung, 2005). This principle states that tying something specific (e.g. a value or lifestyle) to an abstract concept brings about the "something specific" with attributes of the concept (Solomon et al., 2013). It follows therefore that where associating a value or lifestyle with consumption behaviour or a specific product, may help establish consumer behaviour towards the product or activity that generates the desired value.

Consumers rarely purchase anything exclusively for functional aspects of the product per se; they seek to derive other benefits from the purchase (Kahle, 985, p. 231). For example, not all consumers purchase or use a mobile phone for the sole purpose of communication or a car for

the sole purpose of transportation. The purpose might relate to self-identity (Leung, 1998) which therefore ties this abstract concept to consumer behaviour. Similarly, Herrero, Perez and del Bosque (2014) observed how consumers are increasingly searching for novelty; using Information and Communication Technologies (ICT) for experimenting. Therefore, novelty seeking behaviour results in a 'tendency value' where there is a routine interest in being up-to-date with both fashion and consumption habits (Herrero et al., 2014).

Studying lifestyles involves considering specific products, services or usage situations to provide a more accurate understanding of consumer needs (Vyncke, 2002; Hur, Kim and Park, 2010). Blackwell, Miniard and Engel (2001: In Lee, Lim, Jolly and Lee, 2009, p.155) credit the concept of lifestyles for being more comprehensive than that of demographic and socio-economic characteristics; individuals' lifestyles provide reliable and stronger predictors of consumer behaviour (e.g. acquisition, use and disposal of products). Similarly, Sharif, Shafi and Hasim (2014), recommended use of lifestyle research where there is a need to identify market segments that result from many changes (e.g. market), and the prediction of consumer behaviour over time (behaviour and consumption patterns) as well as mitigation of risks presented by new products (e.g. privacy and intrusion).

2.3.1 Lifestyle Defined

The first and most commonly used definition of lifestyle was by psychologist Lazer (1963) who stated that, *"Lifestyle is a systems concept. It refers to a distinctive and characteristic mode of living, in its aggregate and broadest sense, of a whole society or segment thereof... aggregate of consumer purchases... are consumed, reflect a society's [or] consumers' lifestyle"* (Anderson et al., 1984:2). This definition portrays lifestyle as something that an individual develops and coexists with during their lifetime, a view echoed by Lee, Scott and Packer (2014). Veal (1991, 1993) defines lifestyle as an individual and social behaviour pattern unique to that individual or group, with potential of influencing choices over time. Similarly, Batra, Mayres and Aaker (1996) refer to lifestyle as a combination of an individual's patterns of interests, opinions and activities, which provide a rich and meaningful picture of a person (Nabirassool, 2014:1032). Nonetheless, Batra et al., s' (1996) definition while comprehensive, seems biased towards the activities, interests and opinions (AIO) theory by Wells et al., (1974).

A recent, general and encompassing definition by Yu (2011) describes lifestyle as a, "set of behaviours reflecting individual psychological concerns (internal beliefs) and sociological consequences [external stimuli]" (Hassan, Ramayah, Mohamed and Maghsoudi, 2015, p.158). Furthermore, Bronfenbrenner (1977: In Lee, Scott and Packer, 2014) concurs with Yu's (2011) view, highlighting the effect of the micro and macro environment on individual behaviour. These two definitions bring together the psychological and sociological constructs, used to predict behaviour. A more simplistic definition by Chaney (1996) portrays lifestyle as patterns of action segmenting people based on what they do and why they perform actions. Knowledge of lifestyles is significant, brands are shaped by lifestyles; hence, an in-depth understanding of consumer lifestyles can help to better predict consumer behaviour.

In related consumer culture studies, (Featherstone, 1987: In Lee et al., 2014) lifestyle was specifically defined as a pattern of consumption while Bourdieu (1990) linked lifestyle to habitus; arguing how lifestyle reflects the habitus of an individual and therefore becomes the 'systematic product' of that habitus (Lee et al.,2014). Given a lack of agreement on the operational definition of lifestyle, Anderson et al., (1984) in their critical review of lifestyle and psychographics, posited that lifestyle refers to consistencies in overt behaviour which may or may not reflect cognitive (thinking, feeling and action perspective) styles. The most recent definition by Lee et al., (2014) describes lifestyle as a choice of living: consumers can decide which lifestyles they want to follow. In the context of location based services therefore, many of the choices consumers make reflect their lifestyles; starting with choice of apps, how these are used (e.g. socialisation, *'checking in'*, responding to advertising messages); adoption of new services such as location-based service, choices that individuals make anywhere and anytime using mobile devices. Peter and Oslon (1994, p.463 cited in Vyncke, 2002) defined lifestyle as the way in which people routinely go about their daily lives. Furthermore, Lee et al., (2014) concluded that the lifestyle of an individual is one of the key elements in a decision. Based on the varying definitions of lifestyles, this study observed the evolving nature of lifestyles.

2.3.2 The lifestyle Concept in Consumer Behaviour

Despite a lack of agreement on exact origins of the lifestyle concept, writers in social sciences (Ansbacher, 1976, p. 196: In Anderson, et al., 1984) trace this as far back to the 16th century. In the social sciences, Veblen (1899) came up with a 'fashion of thinking' regarding social, economic, and consumer behaviour, that is still popular (Mills 1953: In Anderson, et al., 1984). Per Veblen's (1899) theory of Conspicuous Consumption, each social class tries to emulate consumption behaviour of the class above it. This search for status, then leads to a continuous drive to acquire new consumption goods enabling individuals to stand out from others. Furthermore, Veblen (1899) writing in his Theory of the Leisure Class, referred to 'changing styles' and 'schemes of life' but his concept of lifestyle related strongly to vertical points in a class hierarchy (Trigg, 2001): between the upper; middle and lower classes of society.

Hur, Kim and Park (2010:295) attribute development of the early concept of lifestyle to Max Webber (1954) and psychoanalyst Alfred Adler. Weber (1946, 1947) emphasised collective lifestyles that start and spread by status groups: concurs with the fashion notion posited by Veblen (1899). A more in-depth contribution was made by psychologist Alfred Adler (see Anderson and Golden, 1984), who stressed the uniqueness of everyone observing similarities between individuals and their lifestyles. Furthermore, a review of the lifestyle concept by Ansbacher (1976) indicated the successful application of this concept at different levels of aggregation: both individual and group level. Thus, members have a stable psychological relationship to each other over time; but also at a more generic level, where members share only one characteristic in common through which they are classified. In addition, variations in style exist in segments as well as in actual behaviours, cognitive styles, response styles and complex response styles. Ansbacher (1976, p 192) noted the existence of lifestyle typologies, but, unlike Anderson et al., (1984) made no distinction between cognitive (thinking, feeling and perceiving) processes and observable behaviour arguing that lifestyle bridges cognitive response styles.

In consumer behaviour, the lifestyle concept was pioneered by Bell (1958), Rainwater, Coleman and Handel (1959) and Havinhurst and Feigenbaum (1959) in the 1950s to aid in predicting and explaining consumer behaviour (Anderson et al., 1984). Based on social choice, lifestyle and consumption studies, Bell (1958) reported the symbolic contextual importance of

consumption. Knowledge of lifestyle enables marketers to understand, explain and predict consumer behaviour (Anderson et al., 1984). In another related research, Rainwater et al., (1959) highlighted the significance of using lifestyle contexts to interpret shopping and consumption behaviours.

Yu (2011), also places origins of the lifestyle concept in the 1950s (Havinhurst and Fiegenbaum, 1959: In Yu, 2011), where theory based lifestyle work was designed to help marketers understand consumer behaviour. Holt (1997) however places the study of lifestyles in the 1960s: use of segmentation schemes to map out social consumption patterns. Despite the seeming lack of agreement on the true and exact origins of lifestyles, Anderson et al., (1984) offers a more realistic chronology. Thus, the authors credit Bell (1958), Rainwater, Coleman and Handel (1959), and Feigenbaum (1959) for introducing the lifestyle concept in consumer behaviour literature. Based on this chronology, the inaugural period of lifestyle studies was towards the end of the 1950s, which is in line with dates of the first lifestyle framework. In response to a lack of empirical definition of lifestyles, Lazer (1963) provided the first and widely used operational definition: lifestyle as a systems concept. In contrast, Levy (1963), Moore (1963) and Kelly (1963) criticised his definition for being repetitive opting instead for one that is more encompassing. Thus, Levy (1963) perceived lifestyle as a large complex symbol in motion, a patterned way of life and unified patterns of behaviour whereby consumer purchases follow a pattern. Therefore, products bought as part of a 'lifestyle package (Anderson et al., 1984). We can therefore see value of the lifestyle concept to consumer behaviour studies as provision of rich and synergistic information that encompass culture: demonstrating a broader perspective.

In terms of gathering practical data on what constitutes lifestyle, early studies relied on inductive techniques designed to record compound consumption patterns that started to emerge in Western industrial societies (Well, 1974: In Holt, 1997). Thus, use of question inventories e.g. AIO (activities, interest and opinions) scales to group respondents into specific lifestyle groups. The lifestyle dimensions (batteries) provided psychological profiles derived from social categories such as social class (Myers and Gulman, 1974: In Holt, 1997) and gender (Douglas and Urban, 1977: In Holt, 1997).

2.4 Brief Overview of Well-established Frameworks to represent Lifestyle

A brief overview of well-established lifestyle frameworks is presented in this section. Lifestyle measurement can be traced back to the late 1950s. Two most commonly used instruments are activities, interests and opinions (AIO, Wells et al., 1971) rating scale and the value, attitude and lifestyle (VALS) rating scale by Mitchell (1983). There has, however, been a lack of agreement regarding the efficacy of such lifestyle tools with Herrero, Perez and del Bosque (2014) citing the Rokeach value survey (RVA, 1973), the List of Values by Kahle (LOV, 1983) and the Stanford Research Institute's values and lifestyles scale (SRI, 1980, VALS) as the three most commonly used scales. Vyncke (2002), however only cites the RVA as the most often used inventory. Nonetheless, it is beyond the scope of this PhD study to outline each of these lifestyle scales. Anderson et al., (1984) credit the AIO rating scale with pioneering measurement of lifestyles. Thus, the AIO has become synonymous with the study of lifestyles by default. Similarly, Holt (1997) and Vyncke, (2002) acknowledge the potency of the AIO scale arguing how all the other value instruments are mere incarnations. In this study, the focus will be on the AIO. Numerous lifestyle perspectives exist and these range from psychology (Levi 1963, 1999; Wells, 1975; Sarli and Hon Tat, 2011), sociology (Anderson and Golden, 1984; Lee, Scoot and Packer, 2014; Veblen, 1899) and consumer culture (Featherstone, 1987: In Lee, et al., 2014; Arnould and Thompson, 2005; Bourdieu, 1990; McCracken, 1998).

Table 2. 2: Brief Summary of Lifestyle Literature Disciplines

Author(s)	Discipline	Focus
Levi (1963; 1999) **Wells, (1975)** **Sarli et al., 2011**	Psychology	Relationships between brands/ products consumed and resulting lifestyles. Ties in identity or symbolism (consumer culture literature) and relationships between products and lifestyles.
Anderson et al., (1984)	Sociology	Working definition of lifestyle. Lifestyle encompassed characteristic patterns of observable behaviour and cognitive processes and properties (e.g. values and interests).
McCracken cited in Chan, et al., p, 360, 2005)	Consumer Culture	Role of products in communicating social differentiation and identity.

We have seen in Table 2.2 how lifestyle studies span different academic areas with each study seeking to explore the role of lifestyle in consumer decision making and response. Some consistent theoretical frameworks have underpinned lifestyle research. Most of these studies have used and adapted traditional lifestyle measurement scales (e.g. AIO, RVS, LOV and VALS). As established in the previous section, some consistent theoretical frameworks have underpinned lifestyle research. These frameworks are; AIO approach, values systems, RVS, LOV and finally the Personality/Values Lifestyle approaches. In terms of the AIO, Psychologist, Wells et al., (1971) pioneered the profiling of individual lifestyles with the AIO study noting activities as real observable behaviour. Per Ahmad, Omar and Ramayah (2010, p. 235), AIOs represent consumers' patterns of behaviour; lifestyle patterns of behaviour. In breaking down the AIO framework, activities refer to actions carried out by individuals such as hobbies, social events, work, shopping among others. Ahmad et al., (2010, p.235) observed that interests are commonly defined by consumer psychologists as the nature of the excitement and arousal triggered by an expectation or on-going participation in a behaviour. Lee, Lim, Jolly and Lee (2009) perceive interest statements to be what a person places importance on such as interest in recreation. Lastly, opinions pertain to beliefs and views held by an individual about others, themselves, social issues, products and culture (Vyncke, 2002). Plummer (1974) noted key lifestyle attributes as daily activities, interests (e.g. media, the arts, food, recreation etc.) and opinions (general issues such as business, culture and economics). The AIO rating scale has been the most extensively used and operationalized measurement scale in consumer behaviour studies almost becoming an idiom for the lifestyle concept (Anderson et al., 1984). In this review of frameworks, the main focus will be on the AIO whilst a summary of studies that developed AIO will be presented (see Table 2.3).

A research line of special relevance by Anderson et al., (1984) shows the value of AIO based studies (e.g. Wells et al., 1971, Plummer, 1974; Gutman, 1982, Lin, 2003; Hsu and Chang, 2008; Kumar and Sarkar, 2008) in helping marketers to deliver tailored products and services to unique segments. We have also seen how the AIO has been revised over time to suit various contexts. For example, Kaynak and Kara (2001), Kucukemiroglu et al., (2007) and Spillan, Chaubey, Ziemnowicz, Singh and Vyas (2007) revised the original AIO scale items to suit their

respective studies. In addition, one study (Yu, 2011) combined various lifestyle scale elements (e.g. AIO, VALS, RVS and LOV) in a study seeking to construct and validate a lifestyle scale.

Table 2. 3: Brief Outline of the AIO lifestyle Framework Application

Author	Focus	Contribution to Lifestyle Knowledge
Kaynak and Kara (2001)	Exploring the effect of ethnocentrism on consumer and purchase behaviours	Congruence between previous lifestyle studies in USA, Western, Eastern Europe and Japan
Kucukemiroglu Harcar and Spillman (2007)	Identifying market segments among Turkish and Vietnamese consumers	Lifestyles influence ethnocentric buying tendencies
Spillan, Chaubey, Ziemnowicz, Singh and Vyas (2007)	Explored effects of lifestyle dimensions and ethnocentrism on Indian consumers' buying decisions	Five lifestyle dimensions emerged
Lee, Lim, Jolly and Lee (2009)	To identify the relevant lifestyle factors that affect consumer adoption of technology products.	Established the ineffectiveness of the AIO statements in providing an accurate and broader view of the impact of lifestyle on technology adoption Four internet related utilitarian and hedonic lifestyle factors (e.g. fashion consciousness, leisure orientation, internet involvement, e-shopping preference) emerged.
Yu (2011)	Combining lifestyle scale and validate a combined and reflective measurement.	Consumers were likely to adopt those products that fulfilled their routine needs in life

We have seen the role of lifestyle in consumer purchases in Table 2.3. Nonetheless, the effectiveness of AIO batteries to measure emerging lifestyles is disputed. Yu (2011) and Rao et al., (2014) recommend the use of broad –based consumer typologies to reflect a range of experiences and lifestyle issues concerning consumer behaviour. Rao et al., (2014, p.11) argued that for successful application of the AIO rating scale in consumer lifestyle research, three broad areas must be addressed; consumer activities, media markets and consumer sub-group.

i. Consumer activities- Based upon a lifestyle concept that addresses social psychological constructs (e.g. opinion leadership, innovativeness, social class etc.) thus making it easy to interpret, predict and control consumer behaviour patterns.

ii. Trend data –Continuous collection of trend data (e.g. consumer choice, consumer perceptions, determinants of consumer satisfaction, consumer attitude and shopping behaviour) showing how consumers are changing.

iii. New typologies – Use of general segmentation to provide an outline of new typologies (consumer segmentation, lifestyle segmentation, internet advertising, values and lifestyles) which are then developed by combining activities, needs and values. Such an approach would result in the production of tailored products, services and media.

iv. Media markets – Given the rapid and unprecedented growth of the media industry, research in this area aims to explore consumer media usage (home living patterns, needs, motives and media preferences); style of media use and types of media content.

v. Consumer sub-groups –Use of lifestyle research to classify the psychological attributes of different consumer groups (the elderly market, opinion leaders, brand choice behaviour (brand knowledge), teenagers' intentions and behaviour), perceptions about products, needs, motives and expectations.

Given that the first AIO scale was developed in Western Industrial societies (Well, 1974 cited in Holt, 1997), it is not surprising that subsequent studies have adapted or modified this scale to suit different countries and cultures (see Table 2.4, for a chronology of the literature). The next section concludes with a table summarizing traditional lifestyle studies.

Table 2. 4: Overview of Lifestyle Studies

Author(s)	Focus	Main Findings/Strand of thinking	Contribution
Early studies that introduced the Lifestyle concept 1850s to 1980s			
Adler (1898)	Developing and integrating the lifestyle into an idiom	Observed the uniqueness of everyone as well as similarities amongst individuals and their lifestyles. Individual subconsciously respond to life situations in a repetitive way throughout life. Adler (1988) saw the role of the individual as an actor who makes decisions to achieve goals in life: life tasks influenced by the society in which they live. Highlighted the existence of lifestyle typologies e termed the 'Adlerian Psychology'.	Pioneered the development of personality types. The 'Adlerian Psychology' resulted in the lifestyle concept becoming an idiom and thought in lifestyle studies (e.g. Ansbacher, 1946 and Webber, 1946, 1947): provided lifestyle typologies with which to segment individual consumers based on their unique lifestyles.
Veblen (1899)	Conspicuous consumption. Theory of the Leisure Class	Fashion of thinking: lifestyles covering social, economic, and consumer behaviour. Preferences are socially contingent on the individuals' position in the society.	Mills (1953), Anderson et al., (1984), Bourdieu (1984) and Trigg (2001) built on the studies by Veblen (1899); classifying different consumption patterns and then linking this with lifestyle.

Author(s)	Focus	Main Findings/Strand of thinking	Contribution
Early studies that introduced the Lifestyle concept 1850s to 1980s			
Bell (1958)	Developing a model to predict and explain lifestyle in consumer behaviour	Demonstrated the symbolic contextual significance of consumption and proposed a model that explains this behaviour. Knowledge of lifestyles enables prediction of consumer behaviour.	Informed latter studies by Yu, (2011) who used this scale as one of the key traditional scales validated for use with emerging electronically mediated lifestyles.
Wells (1973)	Relationships between brands, consumers and emerging lifestyles.	Profiling individual lifestyles using the Activities Interest and Opinion (AIO) battery. The AIO scale represents consumers' patterns of behaviour used to segment customers effectively.	Foundation for future lifestyle (e.g. Ahmad, Omar and Ramayah, 2010): The AIO has therefore become an idiom for lifestyles: starting point for most lifestyle related studies (traditional and contemporary).
Ansbacher (1976)	Identifying the varying levels at which lifestyles typologies applies to consumer segments.	Observed variations in segments and actual behaviour (response styles) at both individual and group levels: supports the existence of lifestyle typologies. For example, a limited segment to totality of behaviour when this becomes a lifestyle. Lifestyle represents consistent actions and patterns of behaviour occurring over time.	Indicated that lifestyles may change over time: simple lifestyles to modify to complex response styles over time. Study mirrors the current changes in lifestyles from simple atypical responses (traditional AIO approaches) to more unique and contemporary responses e.g. responding on the move (LBS, LBA).

Author(s)	Focus	Main Findings/Strand of thinking	Contribution
Key Studies that tried to define/ categorise the lifestyle concept 1960s to 1990s			
Lazer (1963)	Introduced the first comprehensive lifestyle definition.	Lifestyle: a systems concept; A specific and distinctive way in which individuals or groups live in society. The study of lifestyles provides synergistic information about culture; consumer purchases, consumption patterns.	Foundation for contemporary studies e.g. criticism of definitional approach by Levy (1963). Challenged the earlier definition linked specifically to the AIO approach as a template for all future lifestyle studies. Distinguished between individual and group lifestyles. Informs contemporary lifestyle studies characterised by group as well as individual lifestyles.
Levy (1963)	Refining the definition	Lifestyle is a large complex symbol in motion: composed of sub-symbols, affected by patterns of life's space (e.g. surrounding environment). Consumers are buying a style of life or pieces of a larger symbol there the way they process objects (products, services and consume these) potentially influence lifestyles.	Highlighted the need to look beyond individuals' life patterns focusing on the role of extrinsic variables in shaping lifestyles. Secondly, the study informs on contemporary lifestyles e.g., when consumers routinely use LBS: consumer response in various locations (e.g. home, on the go).
Berkman and Gilson's (1978)	Contemporary definition of lifestyle	Lifestyle: unified patterns of behaviour that simultaneously determine & are determined by consumption. Lifestyle: integrated system of attitudes, values, opinions and visible behaviour	Informed the critical review of lifestyles and psychographics by Anderson et al., (1984). Addresses various definitional inconsistencies; redefining lifestyle as a theoretical tool for segmentation.

Author(s)	Focus	Main Findings/Strand of thinking	Contribution
Key Studies that tried to define/ categorise the lifestyle concept 1960s to 1990s			
Featherstone (1987)	Defining lifestyle and link with changing fashions.	Lifestyle is a pattern of consumption, represents individuality, self-expression and 'a stylistic self-consciousness: possessions, fashions and adoption of styles of life. Lifestyles: indicators of individuality of taste and sense of style of the owner/consumer.	Offered one of the most representative contemporary definitions of lifestyle. Emphasized the need to recognize and categorize both overt and covert behaviour (attitudes, values, opinions and interests,) and cognitive processes (thoughts and feelings).
Author(s)	**Focus**	**Main Findings/Strand of thinking**	**Contribution**
Studies that built on AIO 1990's to 2014			
Bourdieu (1990)	Developed a theoretical model on the sequence of habitus, lifestyle and taste.	Lifestyle as a systematic product of one's disposition. Habitus explains everyday interactions and activities of an individual. Memories from the past display lifestyle through choice.	Influenced recent lifestyle related studies in the travel industry (see Sassatelli (2007) and Lee et al., (2014). Provided a framework that can be used to map out how new behaviour (e.g. using LBS) leads to a predisposition (habitus) to use specific products or services resulting in unique styles (e-lifestyle).
Thompson et al., (1993)	Investigating consumer service quality expectations	Perceived need, innovativeness, physical loyalty and health care socialization significantly related to service quality dimensions. Original AIO dimensions need refining for different contexts.	Informed subsequent AIO based studies providing other dimensions (innovativeness) for use in different contexts. Links with contextual use of mobile devices and overcomes the limited set of purposes and techniques by the AIO rating scale.

Author(s)	Focus	Main Findings/Strand of thinking	Contribution
Studies that built on AIO 1990's to 2014			
Kaynak et al., (2001)	Investigating ethnocentric /region centric consumer behaviour	Non –ethnocentric consumers are more inclined to buy or use-imported products than their ethnocentric counterparts (attitudes, beliefs and intentions). Congruence between this study and previous studies (e.g. USA, Western and Eastern Europe): the reduced AIO template used in this study is applicable in many international contexts.	Provide a reduced AIO scale that has been adapted in other lifestyle related studies (e.g. Kucukemiroglu (2007).
Kucukemiroglu (2007)	Identifying market segments among Turkish consumers using ethnocentrism and lifestyle patterns	A few of the original 56 AIO statements applicable in the Turkish context: fashion consciousness, leadership, family concern, health consciousness, carefree community consciousness, cost consciousness and practicality. Not all the 300 AIO statements are universally applicable	Informed follow up studies on ethnocentrism in Vietnam (Kucukemiroglu, Harcar and Spillman, 2007) and Spillman et al., (2007) in India. These studies adapted the revised AIO scale.
Lee et al., (2009)	Establish lifestyle characteristics that influence consumer adoption of technology products	Only 18 of the 300 AIO statements were applicable. Four internet and hedonic lifestyle factors relevant to the study (fashion consciousness, leisure orientation, internet involvement, e - shopping). Lifestyles are evolving: efficacy of traditional AIO rating scales questionable.	Pioneered e-lifestyle studies and influenced subsequent studies (e.g. Yu, 2011)

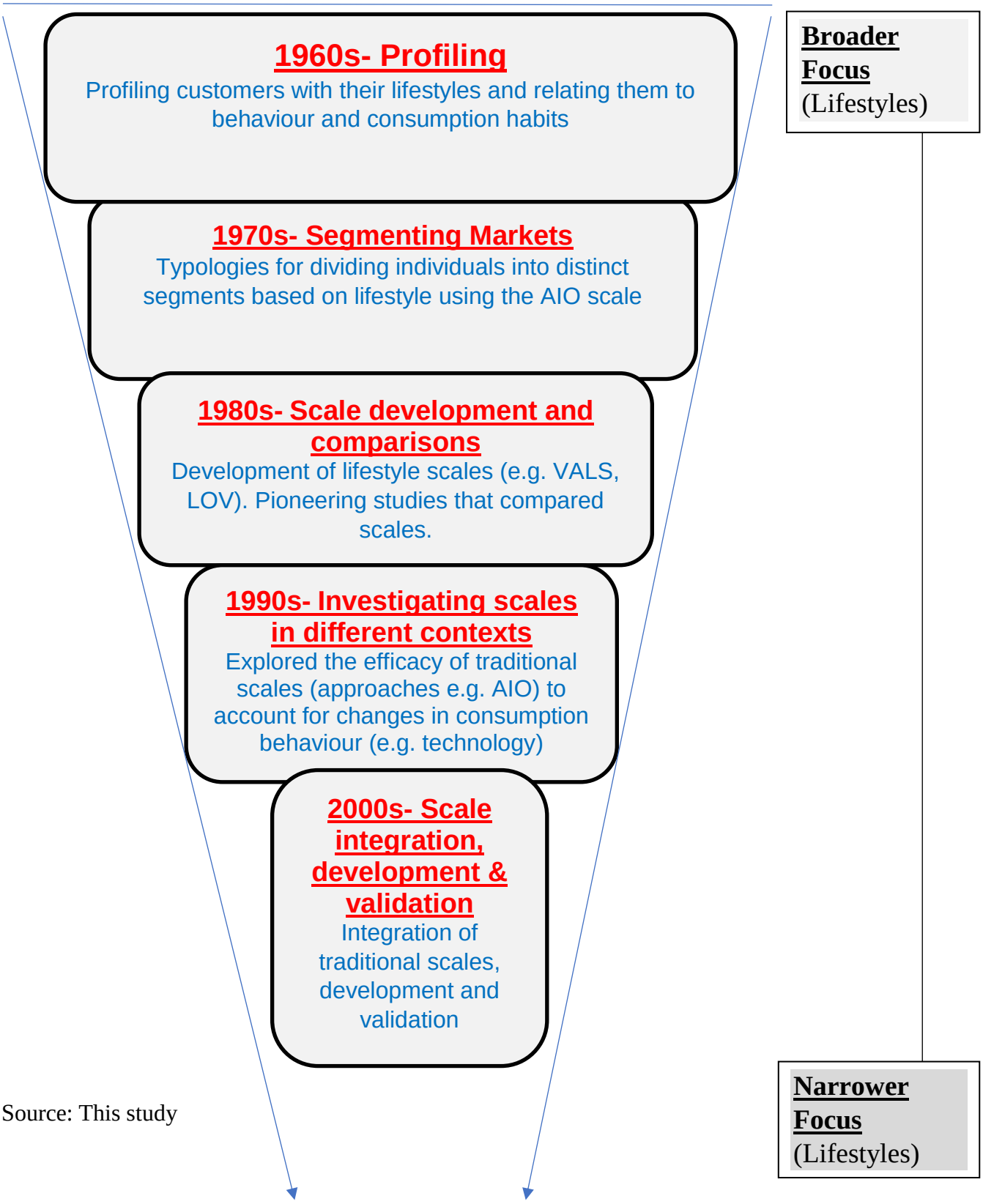
Author(s)	Focus	Main Findings/Strand of thinking	Contribution
Studies that built on AIO 1990's to 2014			
Yu (2011)	Construction and validation of an e-lifestyle scale	No one-lifestyle scale is sufficient to capture lifestyles, especially emerging lifestyles (e-lifestyles). Out of the seven factors that shape individual lifestyles, the need driven e-lifestyle was the top ranked variable that motivated individual response. Consumers are likely to adopt products that satisfy routine life and work needs such as iPhones and iPads as opposed to digital photo frame.	Constructed and validated an e-lifestyle scale. Directed future e-lifestyle studies (e.g. Rao et al., 2014) providing a theory based e-lifestyle scale.
Lee et al., (2014)	Focus on travel motivations and activities of Slow Food members.	Members maintained Slow Food values wherever they travelled. Congruence between at-home and travel behaviours as food consumption in destination country coincided with their habitus. Involvement with Slow Food and lifestyle influenced travellers' decisions in different contexts and locations (home and abroad).	Demonstrated the role of lifestyle in different contexts where individuals have a habitus to choose certain products and services.
Rao et al., (2014)	Explores how products fit consumers' patterns of living based on AIO.	There is need for broad-based consumer typologies to reflect a range of experiences and lifestyle issues. Key criteria include consumer activities, media market and consumer sub-group.	Demonstrates the importance of integrating new typologies into emerging lifestyle studies such as mobile and wired lifestyles.

Author(s)	Focus	Main Findings/Strand of thinking	Contribution
Studies that built on /developed VALS 1970s to 2013			
RVS (1973)	Developing an easy to use values instrument to assess individual values	RVS effective in measuring individual and group value differences: not universally applicable to changes in the global society. Value influences consumers' decisions and choices	Influenced development of subsequent VALS studies (e.g. Kahle et al, 1983, 1989; Vyncke, 2000); VALS1 AND VALS 2. Demonstrated that apart from the AIO values play a significant role in individual choices.
Kahle et al., (1986)	Comparison of VALS and LOV measurement scales	VALS does not allow for the analysis of demographic details unlike LOV. However, value a key construct in examining individual lifestyle. Contrasted LOV had greater predictive utility than VALS in consumer behaviour trends. LOV therefore accounts for more variance in consumer behaviour.	Pioneered studies that compared the two scales. Provides a benchmark for subsequent values based studies highlighting the strengths of the LOV scale of VALS.
Chang et al., (2005)	Exploratory study to test the efficacy of traditional lifestyle instruments in determining online consumer behaviour	There is limited applicability of VALS in measuring lifestyle characteristics of Hong Kong Internet users. Two key user groups emerged *experiences* prone to read online news and *survivors* who did not embrace online news media. Traditional lifestyle scales not predictive as to whether internet users would adopt online news. Lifestyle a strong predictor of the types of online news those online users read and the related attributes.	Highlighted the need to develop a well-tested and culturally sensitive VALS system for Hong Kong.

Author(s)	Focus	Main Findings/Strand of thinking	Contribution
Studies that built on /developed VALS 1970s to 2013			
Valentine et al., (2013)	To provide a segment characterization of Generation Y using the VALS typology. Explain the media habits of this population.	Majority of Generation Y respondents belonged to three VALS' types ('*experiencers'*, '*strivers*' and '*achievers'*). Generation Y greatly influenced by technology and the internet.	Provides the first characterization of generation Y consumers. Influenced future studies on Generation Y lifestyles (Viswanathan and Jain, 2013). Provides detailed insights into values, attitudes and media habits of Generation Y consumers.
Author(s)	**Focus**	**Main Findings/Strand of thinking**	**Contribution**
Studies that built/developed LOV 1980s to 2007			
Beatty et al., (1985, 1986).	Examining alternative approaches to the Value approach by comparing the LOV and the RVS.	The two measures cannot be compared on overall compatibility; do not use a common/overall scale. The LOV has greater influence in people's lives than other values measures. Survey results indicated that the LOV scale had more measures that influence people in their daily lives than the RVS. Both surveys important; address several important consumption areas.	Demonstrated the importance of the values approach in informing consumer behaviour studies. Highlighted the cost implications of either method: the LOV proved to be easier to administer and complete. Recommended the probing of new consumption areas (e.g. telephone usage and computing). Secondly, highlighted the need to consider the interaction between values and situations. This has potential to inform LBS users how, interaction patterns in different contexts (e.g. location and usage situations).

Author(s)	Focus	Main Findings/Strand of thinking	Contribution
Studies that built/developed LOV 1980s to 2007			
Lee et al. (2007)	To analyse extant measurement scales for values. Develop a measurement approach that overcomes limitations of previous VALS scales; BWS.	The Best Worst Scaling (BWS) technique offers a real alternative to previous value scales in studying value as well as the role they play in people's lives. BWS reduces equivalency issues by using words instead of numbers.	Informed subsequent lifestyle scale development (e.g. Yu, 2011), providing an alternative to traditional rating and ranking scales. The new approach requires respondents to choose the least and most important factors.
Author(s)	**Focus**	**Main Findings/Strand of thinking**	**Contribution**
Studies that combined earlier ideas (Personality/Values/Lifestyle) 1990s to present			
Holt (1997)	Developing an all-encompassing framework offering a better theoretical understanding on lifestyles	Consumption patterns are regularities in consumer behaviour. Traditional approaches fail to take account of changes in consumption behaviour (e.g. social, technological). Traditional research instruments (personality/values lifestyle analysis) less useful in the postmodern era: poststructuralist lifestyle analysis vital.	Informed lifestyle studies related to adoption and use of technology (e.g. Yu, 2011; Arnould and Thompson, 2005).

Figure 2.3: Summary of Key Lifestyle Studies Focus



Source: This study

The overview of literature has shown phases in lifestyle literature from the 1960s to 2000s showing a shift of focus from traditional lifestyle studies that profile customers to contemporary studies that define, develop and validate e-lifestyle scale (See Figure 2.3). The first phase (1960s) appeared broad in scope drawing interest from a few researchers, the three next phases (1970s; 1980s and 1990s) were characterised by a narrowing of focus involving a significant number of researchers. The last phase (2000s) focused on changing lifestyles with a few but focused studies seeking to determine the relevance of traditional scales in studying emerging consumer lifestyles in varying contexts.

2.4.1 Comparison and Contemporary Use of Lifestyle-Related Measurements

Yu (2011) posits that VALS has become the most widely used lifestyle measurement instrument (no period given), while Holt (1997) notes that the LOV dominated lifestyle research studies in the 1990s. Kahle et al., (1986) report the widespread and dramatic impact of the VALS (e.g. use by New York Times, Penthouse, Boeing Commercial airline company, etc.). Holt (1997) however criticises the value based studies for over relying on a narrow list of universal antecedents to human action to explain consumption patterns instead of using psychological traits obtained from comprehensive measures (e.g. personality values approach to lifestyles). Theoretically, where VALS differs with AIO is that the former uses a deductive approach-grouping people into lifestyle groups based on their rankings on earlier values. In contrast, the AIO scale uses pre-determined measures that focus on intrinsic psychological characteristics using an inductive approach.

As with any other framework, VALS is criticised for using rating scale items that are not identifiable across geographical contexts. For example, Mitchell (1983, p32) applied the VALS instrument to five European countries (France, Italy, Sweden, United Kingdom and Germany) and observed that owing to the different population structures of groups in the countries (i.e. different cultures, values, beliefs; e.g. in Spain) cultural influences could interfere with the results. It is therefore necessary to validate VALS instruments in each new country to enable the dimensions and the number of the items in the rating scales to be adjusted. Despite the lack of conclusive evidence to indicate which instrument is the best in assessing individual values, VALS and LOV are much popular than RVS (YU, 2011; Chan et al., 2005).

Valentine et al., (2013) used the VALS typology to segment college students from a population of Generation Y consumers based on their media habits. Mainstream media do not influence this group, instead, they rely more on new or emerging media (Peterson, 2004). In terms of operation, participants were required to complete the full 'New VALS' survey available online on the SRI International website. Results demonstrated the usefulness of the VALS typology in segmenting Generation Y consumers with more than 92 % of respondents falling into the three VALS types. Secondly, results demonstrated the applicability of the VALS typology in segmenting Generation Y consumers. Most the respondents (59 %) were experiencers, 24 % were strivers, and 9% were achievers; remaining 8% were Innovators (3%), Believers (2%), and Thinkers (1%). Furthermore, the results for resource levels of each segment were congruent with those of the general VALS typology.

Zhu, Wang, Yan and Wu (2009) adopted 56- VALS items in their survey of consumer lifestyles in the Chinese mobile market. Results of this study led to the segmentation of the consumers into four lifestyle cluster groups based on choices for different charging features. Findings also demonstrated differences in the clusters attributable to consumers' utilitarian and hedonic use of the mobile charging attributes. Herrero et al., (2014) used the VALS scale to examine the influence of values and lifestyle on the use of ICT in Spain. Six dimensions from the VALS scale were evident and used indicating that the Spanish values system was quite like that of the American society. However, some items (10 in total) had to be removed from the original VALS scale: some of the groups such as '*survivors*', and '*sustainers'* were not identified in the Spanish research.

Contemporary LOV studies include measuring values using Best- Worst Scaling (Lee, Soutar and Louviere, 2007). Lee et al., (2007) explored the use of the current measurement scales in collecting values data. Research findings indicated that the LOV scale could be adapted across cultures than either the VALS or the RVS. Weng and Run (2013) used the LOV scale items as mediating variables in their research on Malaysian consumers' personal values and sales promotion choices on their overall behavioural intention and purchase satisfaction. Whilst results demonstrated the impact of sales promotion technique on purchase intention and satisfaction, there were no visible links between satisfaction and intention to purchase. Yu (2011) used the VALS and LOV scales among other scales (e.g. AIO and RVS) to develop four constructs for an e-lifestyles scale. Whilst the first three constructs (e- opinions, e-activities, e-

interests were based on the AIO; the e-values construct was derived from LOV, VALS and RVS studies.

2.4.2 Evaluation of Traditional Lifestyle Approaches

There is plenty of literature on lifestyles (Wells and Tigert, 1971; Plummer, 1974; Gutman, 1982; Mitchell, 1983; Soutar and Clarke, 1983; Kahle et al., 1986; Bowles, 1988; Kahle and Kennedy, 1989; Thompson and Kaminski, 1993; Grunet et al., 1997; Bates et al., 2001; Lin, 2008; Brunso et al., 2004; Green et al., 2006; Hsu and Chang, 2008; Kumar and Sarkar, 2008; Jensen, 2009). However, none of these studies directly explored people's e-lifestyles (Yu, 2011). As noted by Yu, Li and Chantatub (2015, p.200), traditional lifestyle instruments are less effective when used to assess peoples' lifestyles influenced by current developments in technology. For example, Abeele Antheunis and Schouten (2014) recognised the increasing importance of mobile phones for coordinating daily activities (e.g. shopping and entertainment). Ahmad et al., (2010) notes that consumers are time deprived hence tend to multitask: leading to significant changes in shopping activities, lifestyle and purchasing behaviour. Furthermore, Dhar and Varshney, (2011) recognise the potential of these new patterns of living (lifestyles) to result in new uses for mobile phones such as LBS. These changes come at a time when there are limited predictions of lifestyles (e-lifestyle scales that reflect the emerging lifestyle trends): need for research that uses a wide spectrum of segmentation predictors to reflect emerging lifestyle trends (e.g. e-lifestyles).

Lee et al., (2009) contends that despite the general realisation of the potency of lifestyle factors to the adoption of technology products, little research has identified suitable measurement scales for these emerging lifestyles. Similarly, Yu, Li and Chantatub (2015) observed that there are relatively few studies focusing on e-lifestyle, research in this area is steadily increasing as well as getting attention. The review of literature (see sections 2.4 and 2.4.1) has shown how the growth of apps has coincided with growth in mobile adoption convergence of ICT. Similarly, Weiss (2013) observed the growth in consumer technology and emphasized the urgent need for studies that explore the synchronous use of smartphone apps with LBS. Put differently, Bruner II and Kumar (2007, p.3) acknowledge the rarity of LBS studies; these few studies were technically based or the data on consumers was qualitative in nature and fail to measure key constructs (e.g. consumer attitudes towards LBS). There is clearly relevance in

exploring these emerging lifestyles where the mobile device plays a moderating role; finding a theoretical framework that is truly reflective of the constructs of both LBS and e-lifestyles/mobile lifestyles. There is potential for key contributions to emerge from the sparse explanatory theory on customer awareness, e-lifestyles and response to LBS. Yu (2011) questioned the suitability of traditional lifestyle scales to mirror changing consumer shopping and activities and consumption habits in a fast-paced environment where consumers are shopping anywhere, anytime using any device. Such convergence of consumer lifestyles and technology (e.g. smartphones) was clearly highlighted by Ernst and Young (2002, cited in Ahmad et al., 2010, p.234), *"Consumers nowadays no longer fit neatly into marketing segments, but rather 'instaviduals' who jump between many segments during the week, and even during the course of the day…need lifestyle needs of consumers…."* We have seen the changing nature of consumer lifestyles and this calls for news ways to understand emerging consumer lifestyle. The next sections explore these emerging lifestyles focusing on e-lifestyles and mobile lifestyles.

2.5. E-Lifestyles Definition

Kim et al., (2010) introduced the term e-lifestyle contending that extant lifestyles may not fully account for consumer behaviour in cyberspace. In addition, various authors (e.g. Chen and He, 2006; Yu, 2011) have advocated for research from an e-lifestyle perspective to determine how this will affect consumer use of technology enabled products and services (Yu and Li and Chantatub, 2015): help firms reach and market to consumers based on their lifestyles. While various authors have attempted to shed light about e-lifestyle, three key definitions (Hoffman and Thomas, 2008; Hassan, Ramayah, Mohamed and Maghsoudi, 2015 and Kaynak and Kara, 2001) are more relevant in this study. Hofmann et al., (2008, p.4) focus on customer experience, defining e-lifestyles as a digital way of living where individuals create, share and enjoy multimedia information in both personal and mobile environments. Hassan et al., (2015) stresses on the patterns of living that are congruent with technological trends: e-lifestyles are patterns of living resulting from technological advancement.

A more preferred definition is by Kaynak and Kara (2001) which brings together the patterns of living, customer experience and the mediating role of technology. Kaynak and Kara (2001) define e-lifestyle as, "patterns in which people live and spend their time and money through

the internet and electronics (cited in Hassan et al, 2015, p.158). Hoffman et al., (2008) sees the pivotal role of technology (e.g. smart phones) and supporting infrastructure in assisting consumers in managing their day-to-day activities. There are indications that time constraint is driving more and more people to use the internet as a routine tool for conducting daily activities [e.g. reading news, shopping, and networking] (Wajcman, Bittman, and Brown, 2008). In their research on practice of new mobile phone users, Palen, Salzman, and Youngs, 2000, December) noted how respondents relied more on mobile devices for use in unpredictable locations throughout the day. It follows therefore that the more people become time constrained, the more they appear to search for ways in which they can multi-task their activities leading to greater changes in their livelihood (patterns of living and experiences).

Only a few studies have explored e-lifestyles in ICT related areas (Damodaran, 2001: Kim et al., 2010; Swinyard and Smith, 2003, Lekakos and Giaglis, 2004; Yang, 2004; Bregman et al., 2005; Assael, 2005; Alfred et al., 2006, Zhu et al, 2009, Lee et al., 2009; Ahmad et al., 2010; Hassan et al., 2015, Yu and Li, 2015).

Among these studies, Damodoran (2001) investigated the role of human factors and lifestyle in digital technology. Assael (2005) conducted a research on 5 000 internet users where he observed that most heavy internet users were relatively younger; grew up in a technology age and worked more than 50 hours a week. In addition, the same study observed that these heavy internet users were multi-tasking, sought to do more than reasonable within time constraints and were always seeking ways to reduce the time taken to complete routine tasks (Assael, 2005). Hassan et al., (2015) studied the lifestyles of generation Y mobile users in Malaysia and concluded that the internet has created new lifestyle options for empowered young consumers such that an in-depth understanding of e-lifestyles was pivotal in delivering customer satisfaction and loyalty. Other studies by Wei and Lo (2006) on the gratifications sought in mobile phone use and social connectedness in Norway demonstrated that mobile phones were integrated into peoples' daily lives offering mobility and accessibility and were bound to change the way people live, interact and work. In a related lifestyles study in Sweden, Bergmark, Bergmark and Findahl (2011), noted that the internet has morphed to a basic life tool allowing individuals to interact and this has led to the emergence of 'new life's' online. For example, most Swedes indicated that they now carried recreational and social activities

online (e.g. romantic interactions). Furthermore, research pointed to a dramatic rise (from 21% to 65%) in the proportion of this population who go online regularly (Bergmark et al., 2011).

2.5.1 E- Lifestyles in Consumer Behaviour

The internet has dramatically changed consumer lifestyles; consumers now spend a great amount of their time on the internet socializing, reading news, purchasing products or services, among other activities (Lee et al., 2009). This digital revolution has led to changes in consumer behaviour as consumers evolve towards to e-lifestyles. Whilst the impact of technology on consumers' daily lives is undisputed, Hur, Kim and Park (2010:302) acknowledged the mediating role of lifestyle in most consumer purchase and usage decisions. This assertion of the role of lifestyle is congruent with foundations of early lifestyle studies (e.g. Lazer, 1963; Wells and Tigert, 1971; Plummer, 1974; Gutman, 1982; Mitchell, 1983). The 'lifestyle' concept originates from the fields of psychology and sociology and Lazer (1963). The concept derives its origins from a lifestyle work theory designed to help marketers understand customer behaviour emerging from the 1950s (Yu, 2011). During this era, there were clear boundaries between being offline and online as retail transactions were purely offline. The last decade however has seen a remarkable shift to a digital era whereby consumers are choosing digital items that express both their physical identities as well as their lifestyles.

Consumers are now spending more time online and less time offline resulting in the blurring of the boundaries between being online and offline (Sheath and Solomon, 2014). For example, a recent study of Americans between the ages of 8- 18 years indicated that this group was spending more than seven and half hours daily, consuming entertainment (Sheath and Solomon, 2014). Ahmed, Omar and Ramayah (2010) observes that as consumers routinely use the internet for purposes such as searching for information, reading and recreational purposes they end up naturally adopting such a habit for shopping. To this end, whilst the concept of lifestyle has become central to the study of consumer behaviour, the hyper-convergence of the internet and mobile usage in the past decade has dramatically altered and influenced the way people live. These trends have therefore led to attempts to develop and conceptualize e-lifestyle behaviour.

2.5.2 Brief review of key E-lifestyle Studies

This section examines the evolution of key lifestyle studies between 2001 and 2015, focusing on studies that pioneered and defined e-lifestyles, reviewed literature and those that constructed and validated and adapted lifestyle scales in different contexts. Kim, Park and Moon (2001), Swinyard and Smith (2003) and Yang et al., (2004) led the early studies into e-lifestyles (Yu, 2011) each adopting a different perspective in their investigations. Both Kim et al., (2010) and Swinyard et al., (2003) pioneered the lifestyle scale development of online customers assessing the impact of internet user characteristics on advertising and customer response. Despite the common focus in their study, Kim et al., (2001) and Swinyard et al., (2003) conducted their research in different contexts with the formers' research based in the US whilst for the latter this was based in Korea. Further differences were based on the range of measurement scales used with the former adopting a 27-item scale exclusively for internet shoppers whilst the latter deployed relatively larger scale (38 items) aimed at both online shopper and non-shopper segments. Whilst Kim et al., (2001) identified 6 key online segments (Fashion leader/Innovator; Imitator /Flatterer; Considerable Purchaser; Social Person; Conservative/Polite and Family Oriented) whose characteristics predict choice criteria for online goods. Swinyard et al., (2003) identified four online shopper segments and four online non-shopper segments acknowledging the mediating effect of demographic factors on use and adoption of online shopping. In contrast to the two previous studies, Yang et al.., (2004) pioneered lifestyle research in Taiwan focusing on the relationship between lifestyle segments and their attitude to internet advertising. A 30-item scale was developed resulting in the identification of three distinct lifestyle segments (Experiencers; Traditionalists and 'Self-indulgents'/ 'Risk takers'). Despite differences in focus in these three studies, a common observation was the heterogeneity of internet users and the role of fashion leaders and experiencers in leading in the adoption process while the conservatives and traditionalists were risk averse.

Brengman, Geuens, Weijters and Swinyard (2005) conducted a cross-cultural validation of internet shoppers in Belgium and USA using a blend of traditional and emerging lifestyle scales. Their study focused on validating internet shoppers using a 38-item scale adopted from Swinyard et al., (2003). Results pointed to the existence of four online shopping segments

(Tentative shoppers; Suspicious Learners; Shopping lovers and Business Users) and four non-shopper segments (Fearful shoppers; Positive technology Muddlers; Negative technology Muddlers and Adventurous Browsers).Unlike previous studies (Swinyard et al., (2003) this study generates new insights on the changing perceptions of non-shopping segments which are becoming increasingly positive about online shopping in contrast to previous studies in Swinyard et al., (2003) where the majority of the non-shopping segments were negative about online shopping. In contrast to Brengman et al., (2005) who focused on internet shoppers in general tested the link between consumer preferences for product attributes and lifestyles in the Chinese mobile market. This study used a China Vals scale that is representative of the Confucian culture. Results indicated significant interactive effects between lifestyle clusters and product characteristics on consumer preferences (Zhu et al., 2009). Unlike previous studies (e.g. Kim et al., 2001; Swinyard et al., 2003; Yang et al., 2004 and Brengman et al., 2005), this study introduced new dimensions of quality and price consciousness to e-lifestyle studies. Furthermore, Zhu et al., (2009) tested the link between product characteristics and lifestyles, something that was overlooked in previous studies.

Another strand of studies focuses on a comparison of e-lifestyles literature noting relatively less e-lifestyles studies. Ahmad et al., (2010) in their examination of online shopping continuance in Malaysia, summarised AIO item based studies but failed to explore online consumer shopping lifestyles. Despite its narrow focus (Yu, 2011); this review of literature by Ahmad et al., (2010) demonstrated the potency of some elements of the traditional AIO scale items in informing e-lifestyle scales. Other studies focus on scale construction and adaptation. This comes at a time when the effectiveness of traditional lifestyle instruments in measuring emerging lifestyles has been seriously questioned (Brengman et al., 2005; Ahmad et al., 2010; Pandey et al., 2014; Yu, Li and Chantatub, 2015). It appears however, that as e-lifestyle studies continue to grow, there has been a distinction between those studies that have pioneered and constructed e-lifestyle scales and those that have validated these. Yu et al., (2011) cited the inability of one single scale (e.g. AIO, VALS, LOV, RVS) to closely capture and reflect changing lifestyles and capture consumer life in specific dimensions. Yu et al., (2011) therefore used extant traditional lifestyle scales to construct an e-lifestyle scale (see Table 2.5).

Table 2.5: Adapted e-lifestyle scale

e-Activities	e-Interests	e-Opinions	e-Values
Work	Family	Themselves	Respected
Hobbies	Home	Social Issues	Accomplishment
Social Events	Job	Politics	Fulfilment
Vocation	Community	Business	Relationships with others
Entertainment	Recreation	Economics	Expectation
Club Membership	Fashion	Education	Prejudices
Community	Food	Production	Hopes
Shopping	Media	Future	Demands
Sports	Achievements	Culture	

Source: Adapted from Yu (2011)

As shown in Table 2.5, a 35-item scale that merged psychological (AIO scale) and sociological constructs (Values scale) was developed and administered online. Holt (1997) echoed the need to combine approaches in lifestyle studies by developing the personality/values approach. It is therefore based on this rationale that Lee et al., (2009), proposed an alternative scale; study brings together VALS, ROV and LOV rating scales (see Table 2.4). The very nature of technological services such as LBS implies that these will morph with changing consumer lifestyles hence the potency of having a dynamic measurement approach. In contrast to Yu (2011) s' approach, Chiu, Kim, Lee and Won (2014) re-examined and refined e-lifestyle scales on college age online sporting goods consumers in Taiwan using a modified internet shopper lifestyle scale. Chiu et al., (2014) contend that the omission of some of the original 20-ietm six factor internet shopper model by Swinyard et al., (2003), Brengman et al., (2005), Ye et al., (2011), and Yu (2011) influenced the validity and reliability of results. However, despite using the original scale, their findings were congruent with the previous model by Swinyard et al., (2003) in terms of dimensions used and the emerging clusters.

Pandey et al., (2014) set out to develop and validate an e-lifestyle instrument apt for use in an Indian context. Recognising the potential inapplicability of scales developed for Europe, US and China, Pandey et al., (2014) developed a six-factor scale supposedly tailored for India. Arguably five of the six clusters (E-enjoyment; E-Distrust; E- Self- Inefficiency, E-logistics concerns, E- offers) were evident in previous studies. Noteworthy however, is the introduction of E-Negative beliefs, which is unique to India. Unlike the Negative Technology Muddlers in Brengman et al., (2005) s' approach who were illiterate and distrusted internet security as well as perceived offers; the Negative Beliefs segment in Pandey et al., (2014) were influenced by cultural beliefs. In recent years, extant lifestyle studies have mainly focused on scale adaptation and application. Yu et al., (2015) examined the effects of consumer e-lifestyles on the reluctance to use mobile banking in Taiwan and Thailand. Whilst the use of lifestyle perspectives to explore consumer motivation for using e-banking services is not new (e.g. Swinyard et al., 2003; Zhu et al, 2009), Yu et al., (2015) pioneered the examination of the role of lifestyle in the mobile banking context (Yu et a., 2015, p. 2001). In comparison with previous contemporary studies (e.g. Yu, 2011), this study highlighted the differences in the effect of the Need-driven e-lifestyle factor in a different context. In Yu (2011), this factor ranked first but in Yu et al, (2015), this factor ranked second for Thailand and third for Taiwan. Secondly, whilst the Entertainment and Sociability- driven e-lifestyle factors were separately rated third and fourth respectively in Yu (2011), these combined into a single factor (Entertainment Sociability- driven e-lifestyle) and ranked fourth and second respectively in the studies that were conducted in Asia (Thailand and Taiwan). The summary of lifestyle properties (Table 2.6) demonstrate growing interest in developing lifestyle scales that mirror changing consumer habits. The previous literature overview (Table 2.4) sought to establish, define and categorise lifestyles using traditional scales (e.g. AIO, RVS, LOV, VALS). In contrast, current studies (Table 2.6: see Kim et al., 2001; Swinyard et al., 2003; Brengman et al., 2005; Zhu et al., 2015; Ahmad et al., 2010; Pandey et al., 2014 and Yu et al., 2015) address the need to redefine, develop, adapt and apply e-lifestyle scales that reflect consumers 'mobile lifestyles'. It is therefore useful to consider e-lifestyle properties.

Table 2.6: Summary of E-lifestyle Properties

Author (s)	Focus	Lifestyle properties 2001-2015	Key Observations
Kim et al., (2001) **Swinyard (2003)** **Yang et al., (2004)**	***Pioneering E-lifestyle studies*** Introduction & definition of modern lifestyles (e-lifestyles).	***Lifestyle segments*** Fashion leader/Experiencers; Imitator; Considerable purchaser; Social person; Conservative/Traditionalist; Self indulgents; Family oriented; Demographic profiles.	Heterogeneity of internet users, pivotal role of fashion leaders & experiencers as well as conservatives & traditionalists in the adoption process.
Brengman et al., (2005) **Zhu et al., (2009)**	***Cross cultural validation*** Testing the applicability of e-lifestyle scales in different countries/contexts.	Tentative shoppers/Conservative powerful consumer; Suspicious learners; Shopping lovers/Fashionable quality-awareness consumer; Business users; Fearful shoppers/Cautious simple consumer; Positive technology muddlers; Negative technology muddlers; Adventurous browsers;	Most segments similar in the different countries with slight variations except the Business user class. Impact of culture on e-lifestyles (e.g. India)
Ahmad et al., (2010)	***Comparison of E-lifestyle studies*** Reviewing extant lifestyle literature to examine the influence of consumer lifestyle factors on online shopping continuance intention.	Identified six studies on lifestyles that have used the AIO scale (Thompson et al., 1993; Kucukemiroglu, 1999; Kaynak et al., 2001; Kucukemiroglu et al., 2006; Spillman et al., 2007; Lee et al., 2009).	The revised AIO scales remain the most popular and widely used lifestyle measurement scale. Knowledge of lifestyle factors provides insight into consumer intention to use online shopping that matching lifestyles.
Yu (2011) **Chiu et al., (2014)** **Pandey et al., (2014)**	***Scale Construction & Validation*** Assess existing scales; construct relevant e-lifestyle scales and validation.	e-Activities, e-Interests, e-Opinions/E-negative beliefs, e- Values; Perceived self-inefficiency/E-self-inefficiency; Shopping lovers; Tentative shoppers; E-enjoyment; E-distrust/E-logistics concerns; E-offers	Most the scale items similar in various countries. Scale application is context specific
Chiu, Kim, Lee and Won (2014)	**Scale Adaptation and Application** Establishing the fit of existing scales to changing consumer lifestyles and online behaviour	Willingness & Interest driven/Willingness & achievement driven; Needs driven; Personal propensity- driven/Personal propensity driven- lifestyle- perceived importance; Entertainment & sociability driven;	Contextual variations in use of the Need-driven e-lifestyle factors. Overall scale rankings not transferable: different importance in different countries.

Table 2.6 notes the growing importance of e-lifestyle in consumer behaviour studies with a growing focus on establishing a scale that is a) reflective of emerging e-lifestyles and b) measures emerging lifestyles. We have already seen how traditional lifestyle studies were drawn mainly from the fields of sociology and psychology (see Lee et al., 2014; Yu et al., 2015; Lazer, 1963; Lee et al., 2014). In contrast, contemporary e-lifestyle studies cut across disciplines [e.g. Technology and Marketing] (see Ahmad et al, 2010; Lin et al., 2011; Yun, Han and Lee, 2013) showing a combined focus on developments in technology related services and consumer behaviour (e.g. shopping intention). Whilst these emerging lifestyle trends are commonly referred to as e-lifestyles, some studies have referred to this way of living as mobile lifestyles (Sheth and Solomon, 2014; Greenberg, 2010). Some others use the term wired lifestyle instead (Beemann, Lohn and Johnson, 1999) highlighting that like traditional lifestyles, these is a lack of operational definition for emerging electronic and mobile oriented lifestyles. Given the rapid adoption of smartphones and convergence of lifestyles and technology, one line of interest in this study was mobile lifestyles. The mobile device (i.e. smartphone) is central to coordinating daily life tasks (Abele Antheunis and Schouten, 2014) and this has resulted in unique lifestyles; mobile lifestyles.

2.6 Mobile Lifestyle

The rapid advance in information and communication technology (ICT: e.g. the internet and mobile devices) is transforming consumers' styles of shopping and ways of living (lifestyles). Sheth and Solomon, (2014) posit that the emergence and proliferation of mobile applications (apps), smartphones, smart watches, and smart glasses is eliminating the need to visit physical shops leading therefore to new types of consumer lifestyles. Greenberg (2010) and Ahmad, Omar and Ramayah (2010) also observe the changes in consumer lifestyle from shopping in bricks and mortar retailers (traditional) to 'click' and mobile points of purchase. Yu (2011) and Hassan, Ramayah, Mohamed and Maghsoudi (2015) stressed the impact that the convergence of the internet and mobile communication has had on the shopping context as well as the way people live nowadays. Bouwman, Lopez-Nicholas and Van Hattum, (2012) and Karnowski and Jandura (2014), observed that the expansion of the internet into mobile is resulting in new usage patterns and behaviour as well as creating new capabilities and user lifestyles.

2.6.1 Wired and Mobile Consumer

The review in sections 2.6.1 to 2.6.4 will look at the emerging lifestyles (e-lifestyle) in the internet era and the various contexts and situations in which consumers express e-lifestyles. Ahmad et al., (2010) coined the concept of wired lifestyles arguing that internet buyers have been online for years, visiting online stores (e-stores) naturally and have therefore developed a 'wired lifestyle'. Whilst it is expected that differences may exist between online and offline consumer behaviour (Jarvenpaa and Todd, 1996/1997), Bellmann, Lohse and Johnson (1999) posit that online consumers by their extensive internet use, exhibit a unique 'wired lifestyle' quite different from an offline lifestyle (Chiu et al., 2014). Earlier work by Ling (2001, 2004) reported this wired lifestyle amongst adolescents in their use of mobile phones. Adolescents developed wired and mobile lifestyles as part of the developmental tasks they face when growing up for example; identity formation, relationship building and establishing independence (Ling et al., 2001, 2004). Wired lifestyle is also referred to as a 'mobile culture'. This style is evident globally amongst youths and is manifest in the way they use internet enabled mobile devices as well as ascribing meanings to uses of products and services (Abeele, Antheunis and Schouten, 2014). Thus, mobile youth lifestyle/culture is defined as a combination of mobile phone practices and understanding serving as a form of self-expression in the daily consumption of services (Abeele et al, 2014). This definition emphasizes the central role of the mobile phone to adolescent life, leveraged by this adolescent group to gain status in peer groups.

The emerging unique ways of living that exploit and use the mobile device in everyday life calls for some new thinking about lifestyle. In the following sections, the review covers some recent thinking that can lead us to a better understanding of the mobile lifestyle and why we need perhaps to look at measurement of lifestyle differently. Section 2.6.1.1 will focus on individual dynamics by using Bourdieu (1990) s' Habitus theoretical framework. This framework will help to shed some light on the role of experience (e.g. using LBS) in influencing individual predispositions towards e-lifestyles. These individual dynamics have the potential to predict and explain the propensity of developing e-lifestyles based on the adoption of LBS via mobile phones. Next, section 2.6.2 focuses on the various mobile lifestyle perspectives starting with the structural and functional perspectives. Next, situational and contextual

perspectives (section 2.6.3) and then concludes with the social and psychological role of the mobile phone (section 2.6.4). A section that summarises the lifestyle research (e.g. mobile lifestyle) follows in section 2.7.

2.6.1.1 The Mobile Consumer- 'Transumer'

Recent Mintel industry reports have pointed to how consumers are using services 'on the go' referring to this new type of consumer as 'transumers'. These *'transumers'* seek access to services in places of commute (e.g. airports, stations and modes of transport), this has resulted in new behavioural response patterns as well as how services are provided. For example, in a recent survey on banking by Galletley (2016: In Mintel), consumers cited convenience as an important factor in choosing a bank account with 54% of surveyed consumers signalling frustration with visiting physical branches. *'Transumers'* need access to services in various locations and in-between time. Galletley (2016: In Mintel) further reports how banks such as NatWest are actively seeking new ways to provide 'on the go' services. Thus, there is a shift from traditional banking activities where consumers visit a bank to banking on the move in mobile locations using apps. Similarly, Baker (2016: In Mintel) sees how consumers are now spending most of their time in transit (e.g. travelling to work) hence a greater demand for on the go services and products. In a related report on eating out and the decision-making process, Caddy (2016: In Mintel) observed how, consumers are spending more time in transit; commutes and 'places in-between'. This group of *'transumers'* prefer 'on the go' meals with lunch being the popular option (39%) whilst breakfast and dinner were jointly less popular (8%). In addition, Caddy (2016: In Mintel) observes how the under 45s demographic group is mostly likely to spend more time 'on the go' actively searching grab and go meals due to time pressure.

A related report by Ballaben (2016- In Mintel) highlighted how *'transumers'* increasingly place value on mobility and portability and how that second screening (e.g. using tablets), gaming and watching videos is gaining traction as well as multi-tablet households. More specifically, Flowers (2016) expressed how men are more likely to use smartphones and tablets regularly and in more situations 'on the go' than women. A similar report by McGivney (2015) cites men as regular downloaders of free apps (fermium apps). Secondly, McGivney (2015) observed how places of commute are becoming *'third places'* thus difference between home,

work and here consumers are always actively seeking access to services 'on the go' to maximise productivity. A third of these *'transumers'* are happy to share location data via apps in exchange for deals. McGivney (2015) also observes how this emerging consumer group (*'transumers'*) heavily relies on recommendations from friends in decisions to use LBS. In addition, the majority (49%) of surveyed respondents used on average 1-3 apps, followed by 34% (used 4-6 apps) with the least number (12%) using more than eight apps. When we look at 'transumers', this presents new ways of responding to services 'on the go' (response patterns) distinct from traditional activities and services. Thus, unique lifestyles of the mobile consumer are emerging; this calls for new ways to understand how e-lifestyles and situational context influences response to LBS in places of commute.

Another perspective on lifestyle and routine consumption is provided by Bourdieu (1990). Using the concepts of cultural capital and habitus, Bourdieu (1990), built a theoretical model in which lifestyles of different social groups can be understood (Trigg, 2001:210). Bourdieu (1990) states that habitus includes, expectations, dispositions and preferences (individual and collective practices) resulting from active experiences in everyday activities that in turn influence lifestyles (Figure 5). Studies by Sassatelli (2007) and Lee et al., (2014) on lifestyles in the travel industry supported this predisposition: individuals who travelled abroad maintained their living patterns (habitus) despite being abroad. Such individuals rely on memories that define their lifestyles through choice; such as the types of location services used, apps etc. (habitus leading to lifestyle and developing into taste). Secondly, an individual depends on prior social and historical forces that shape their experience when it comes to decision making (conditions of existence). Bourdieu (1984, 1990) notes how habitus is related to lifestyle and taste. Where habitus and lifestyle (e-lifestyle/mobile lifestyle) link is in the resulting 'tastes' (choices/preferences) where consumption of products and services become symbolic in various situations leading to a disposition (body *hexis*) to respond in a consistent way to stimuli (Bourdieu, 1984). Reay (2004) maintains that habitus explains interactions and activities of an individual in their social environment; while Allen (2002), argued that every individual consumption choice is manifested in their consumption routine. In the context of location-based services therefore, habitus may mediate the choice of LBS used as reinforced by lifestyle.

2.6.2 Structural and Functional Perspectives of Mobile Lifestyle

This section breaks down aspects of mobile lifestyle. When looking at mobile lifestyles, Abeele et al., (2014) identified structural and functional perspectives that determine lifestyles. The structural domain is characterized by the development of a collective identity resulting from the communicative use and appreciation of the mobile phone. This perspective relates more to individuals who use mobile devices to leverage their status and make a statement of who they are. In their study on consumer lifestyles and adoption, Lee et al., (2009) refer to a fashion lifestyle whereby individuals are innovative, venturesome, attention seeking and early adopters of technology. In terms of a functional perspective, this refers to the actual functions of the mobile communication technologies for making and receiving calls, this varies during individual lifecycles (Abeele et al., 2014). Wei et al., (2006) proposed two perspectives; instrumental and expressive where the former correspond with the functional perspective by Abeele et al., (2014) centred on making calls for daily safety and security. The expressive perspective is like the fashion perspective and focuses on forms of self-expression. Sound knowledge of the perspectives behind lifestyles enables the prediction of consumer lifestyles and specific responses in various consumption related situations.

Hassan et al., (2011) highlighted the importance of lifestyles as predictors of behaviour stating that lifestyles shape brands hence knowledge of specific patterns of actions help to differentiate people based on what they do. These structural and functional perspectives link to emerging e-lifestyles for example fashion segments/experiencers (Kim et al., 2001) whereby users use their devices as a statement of who they are. Where these two approaches differ is that Kim et al., identify the e-lifestyle segments whilst Abeele et al., (2014) focused on why consumers use mobile phones as mentioned before.

Research on the use of the mobile phone as a status symbol revealed three distinct lifestyles, which are trendy, engaged and thrifty mobile lifestyles (Abeele et al., 2014). Trendy users/lifestyle were younger, had a strong devotion to all aspects of the mobile phone, send lots of texts per week, placed greater importance on the fashionableness of their phone, made longer phone calls than other users and accessed their mobile phones more frequently to use the internet. The engaged users/lifestyle were older, used the mobile phone for instrumental and social purposes (chatting and passing time), few accessed mobile internet and had moderate

use of the phone per week. The thrifty users/lifestyle had an overall disinterest in the mobile phone, have the lowest mobile phone use than other groups. Furthermore, this group had the least phone usage for text per week and only a minority of them accessed the internet at least once a month. This group placed little regard for the brand of the phone, choosing instead to personalize devices with covers or handbags.

When we look at traditional lifestyle scales for example the AIO, we can observe some similarities between some lifestyle dimensions such as *Activitie*s and *Interests* and mobile lifestyle where consumers use their mobile devices for entertainment and 'achievements' purposes. This relates closely to the structural and functional perspectives though in this instance, the routine usage behaviour is reliant on the mobile devices as facilitating centres for lifestyles: resulting in unique mobile lifestyles unlike the general traditional lifestyles. Ahmad et al., (2010) posits that customers' lifestyles directly and indirectly influence the customers purchasing behaviour on the internet. Similarly, Pandey et al., (2014) cited the higher time constraints faced by consumers who now shop more frequently and consider a plethora of shopping options online: mobile telephony and internet innovations facilitate these changes in lifestyle (e-lifestyle) enabling consumers to carry out daily activities.

2.6.3 Situational and Contextual Elements driving Mobile Lifestyles

Whilst Lee et al., (2009) and Hassan et al., (2011) and Abeele et al., (2014) focused on the structural and functional use of mobile devices and the link to lifestyles, their approach did not fully address one of the unique characteristics of mobile devices -ubiquity. Mobile devices are usually carried on the person everywhere (Pescher, Reichhart, Spann, 2014) hence there is a need to consider situational and contextual mobile phone use. This section focuses on situations and contexts for mobile devices usage for day-to-day activities. For example, nearly half of all calls were made at places of work (Ling and Haddon, 2003). The Theory of Planned Behaviour (TPB; Ajzen, 1985) has been used to explain the adoption of new media services and the various situations and contexts of mobile device usage. This TPB developed from the Theory of Reasoned Action (TRA; Ajzen, 1975) which considers the influence of social norms on the adoption decision. The TPB (Ajzen, 1985) considers the influence of attitudes towards behaving in a way focusing on subjective norms as well as perceived behavioural control. Subjective norms refer to the pressures put on individual decisions by society thereby

influencing the individuals' choice to execute or not to execute behaviour. Perceived behavioural control refers to the extent to which an individual feel able to carry out a specific behaviour (Karnowski and Jandura 2014) and comprises both situational and internal dimensions. Ajzen (2005) defined situational dimensions as the extent to which an individual can objectively execute behaviour while internal dimensions refer to the extent to which an individual can subjectively execute a given behaviour.

Previous research has extended the TPB (1985) to explore new media starting with the Technology acceptance model (TAM; Davis, 1989), the Unified Theory of Acceptance and Use of Technology (UTAUT; Venkatesh et al., 2003) and the Mobile Appropriation model (MPA-model; Wirth et al., 2008). Karnowski and Jandura (2014) however noted that whilst these theories provided factors that influence new media behaviour, they failed to fully consider the situational contexts of mobile device usage. Karnowski and Jandura (2014) merged situational and contextual factors in their study seeking to gain deeper insights into usage patterns of mobile communications and the specific contexts. Previous studies (e.g. Bouwmann et al., 2012) had either focused on contextual or situational factors separately hence, Karnowski and Jandura (2014) sought to address this gap in research by taking a user-centred analysis of mobile communication behaviour. Other studies that have adopted the TPB include Anilkumar and Joseph (2012) who combined the TPB and TAM frameworks to investigate consumer pre-purchase attitudes towards technology enabled products such as mobile phones and internet shopping. Secondly, Song, Drennan and Andrews (2012) in a study exploring regional differences in consumer acceptance of 3G technologies used TPB as a guiding framework for structuring sections of the semi-structured questions for their study. Interview data was organised into three major categories (attitudes, subjective norms and perceived behavioural control). Results of this study point to emerging mobile lifestyles as consumers perceive that the use of 3G technology facilitate routines (placing), enhances their lifestyles and is a source of fun. For example, under the attitude construct, some of the interviewees indicated that 3G technology would enable them to carry out daily activities anywhere and anytime:

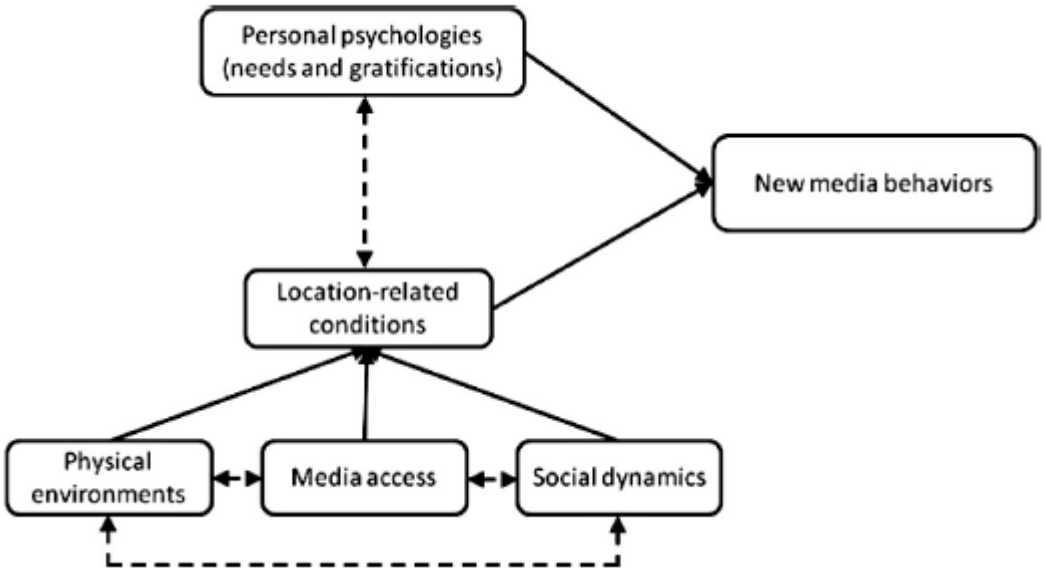
> *"I would be able to get my client's orders by using 3G mobile handset to access my company's website when I am not in my office.' (ID B02, Beijing) 'If I used 3G mobile phone, I would be able to check email at any time and any place, and I would not be worried about missing my boss's email.' [ID S04, Shanghai] 'My job makes me travel*

a lot. I think 3G will get me the access to the Internet when I am on a business trip and the wired Internet is not available.' [ID W05, Wuhan]." (Song et al., 2012, p.9).

Whilst most TPB constructs in this intra-cultural study demonstrated similar influence between Eastern and Western consumer innovation adoption patterns, variations exist regarding the relative importance of the TPB factors between the two cultures. For example, social status (e.g. consumer concerns with face) might significantly influence consumer mobile lifestyles in Western cultures in comparison to Eastern cultures. To this end, Song et al., (2012) recommended that future studies extend the TPB framework to reflect consumer behaviour patterns influenced by present and future technologies and applications. Similarly, Belk (1988) argues for the need for more reflective frameworks as the digital environment continues to mutate behavioural response dynamics.

Consumer behaviour theorists have adopted a different stance in the study of behavioural response bringing in new perspectives such as location-related conditions (physical environments, social dynamics and media access) and personal psychologies (needs and gratifications). Belk (1975) used five categories to define the consumer behaviour environment: physical, social, task, temporal and antecedent states thus providing the template for situational context dimensions. The physical environment is conceptualised as external elements such as possessions, surroundings (e.g. retail outlets); social being the influence of family, and friends (e.g. "social media- social footprints" and "lifestreams"); while task refers to activities undertaken by an individual or groups and the relative levels of commitment. Follow up studies by Lee, Kim and Kim (2005) and Vartiainen (2006) focused on physical and social factors. Vartiainen (2006) perception for these factors was akin to (Belk, 1975) except for the social construct, where they emphasis the influence of social environments on media usage: individuals can use highly observable media to enhance their social image. Zhang and Zhang (2012, cited in Karnowski and Jandura (2014) focused on media behaviour. Zhang et al., (2012) considered personal psychologies (e.g. gratifications) on the one hand and location related conditions (e.g. physical environments, media access and social dynamics (e.g. peer presence and influence) on the other hand (see Figure 2.4).

Figure 2. 4: Situational theory of New Media Behaviours



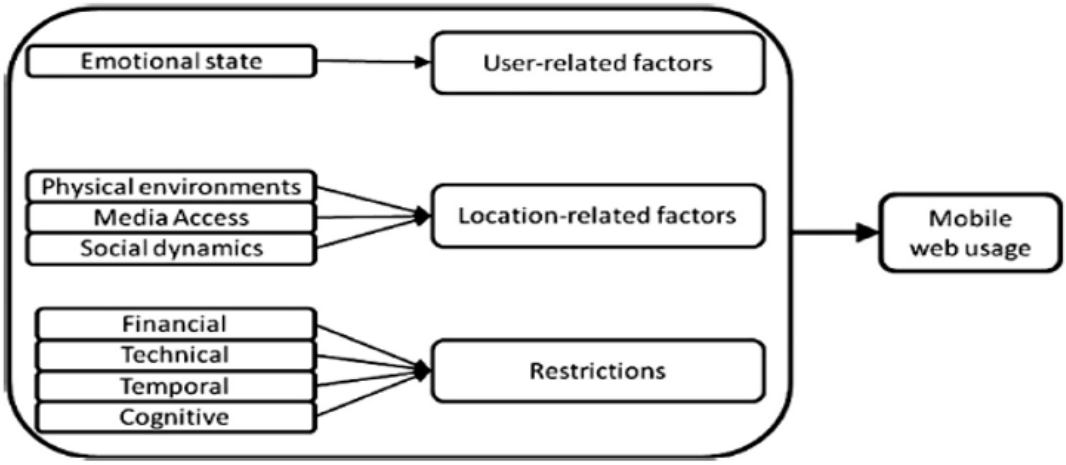
Source: Struckmann et al., (2016): Adapted from Zhang et al., (2012)

Similarly, Struckmann and Karnowski (2016, p.313) notes the influence of the social environment,

> *"This indicates the influence of intimacy on selection decisions, i.e., if there are strangers present, whose personalities, attitudes and behaviour are totally unknown to a user; and to whom a user does not want to open up, the user will user select other communication devices as opposed to when he/she is alone or with familiar people."*

Zhang et al., (2012) conceptualised physical environments as the users' familiarity with his or her surroundings thus whether they are at home or in public places. Media access on the other hand looked at whether an individual had access to other media apart from mobile devices. Struckmann et al., (2016) concluded that new media and social dimensions' influence behaviour and developed a framework that combined TPB and its extensions with the Situational Theory of New Media Behaviours (see Figure 2.4). The value of the new framework is that it conceptualizes mobile web usage as being influenced by user-related factors, location related factors and restrictions.

Figure 2.5: Factors Influencing Mobile web usage



Source : Karnowski and Jandura (2014, p.186)

Based on the research by Karnowski and Jandura (2014), different mobile lifestyles emerged and these can be visualized as six clusters: 'mobile at home', 'en- route, 'hanging out with peers', 'on the way', 'home zone' and 'work or friends'. The results narrowed down these clusters into three main situations in which mobile communication occurs which are 'mostly at home', 'on their way' and 'hanging out with friends'. The 'mobile at home' category was the second largest cluster where usage situations normally occurred at home in highly fixed and familiar environments. Those individuals using devices on their way ('on the go') used these to 'kill time' (e.g. waiting for a bus/train) and they were the largest cluster. Interestingly, the characteristics of the 'on the go' cluster resembles the digital lifestyle predicted by Hofmann et al., (2008). In this digital lifestyle, content was billed to be almost everywhere, following the user wherever they go thus allowing individuals to access virtual content anywhere and anytime. The last cluster comprised those individuals who spend time socializing with friends or peers. This was the smallest group who had fully embraced new technology platforms and used their devices to post content (e.g. photographs and comments on social media).

Other studies such as Wei and Lo (2006) related situational and contextual use of the mobile phone to the work place. In this context, for example, men were perceived to use their mobile devices to make calls while at work. In related studies (Trade Arabia, 2014), various contexts and uses of the mobile phone were reported with most individuals in developed countries

indicating that they used mobile internet (connectivity) for personal development and to support lifestyles. In developing countries, however, mobile connectivity was used mostly for educational purposes. Despite the differences in context and usage situations, the report demonstrated that mobile connectivity has generally had a global effect on peoples' lives; the way they work, communicate, learn and play.

2.6.4 Social and Psychological Role of the Mobile Phone

Wei et al., (2006) see the principal socio-psychological function of the mobile device as the maintenance of symbolic value (making up for loneliness) and proximity citing the role of landlines in transforming nations from geographically scattered psychological neighbourhoods to 'intimate networks'. Bergmark et al., (2011) see social value of the mobile phone and the internet in the digital arena where aspects of social life and relations have shifted or expanded for example reinforcement of social ties via online contacts, and reduction of loneliness and isolation. Katz and Sugiyama (2006) maintain that people look beyond functional uses of new technology or communication benefits, as they seek symbolic value in the routine use of devices. Katz et al., (2006) used the domestication theory (Silverstone and Haddon 2003: In Haddon, 2003) to explore how the mobile device has become integrated into peoples' lives. The theory is about understanding the use of media in everyday life providing insight into various media, social connectedness, and the convergence of different media technologies. Katz et al., (2006) however established that the domestication theory alone could not explain the profound and continuing role played by the mobile device in people's lives. Therefore, Katz et al., (2006) consider the theory of 'fashion' as a guide to how people use the mobile phone as a way of maintaining social identity and express themselves. Table 2.7 presents a summary of mobile lifestyle studies showing different usage situations as well as lifestyle segments.

We can see in Table 2.7 how the role of the mobile device in supporting lifestyle has evolved from traditional lifestyles such as activities, and interests (e.g. general dispositions -Bourdieu, 1990; social connectedness- Wei et al., 2006) to more defined mobile lifestyles (Ahmad et al., 2010; Abeele et al., 2014) and situational contexts (Karnowski and Jandura 2014). These emerging mobile lifestyles have potential to influence consumer response.

Table 2.7: Mobile Lifestyle Studies

Author	Focus and Findings	Key Themes
Bourdieu (1990)	Dispositions, preferences from active experiences influence lifestyles. • Symbolic consumption of products is situation specific. • Habitus explains interactions & activities of individuals in their social environment	• Dispositions/habitus • Preferences • Lifestyle • Taste
Wei et al., (2006)	• Mobile has morphed from a luxury of the rich to an enabler of social relationships. • Conferment of instant membership in a community- a key benefit of mobile device usage.	• Gratifications sought • Gender differences • Social connectedness
Ahmad et al., (2010)	• Wired lifestyle developed by internet users over time • Functional and expressive perspectives	• Wired lifestyle • Mobile culture
Karnowski and Jandura (2014)	• Main types of usage situations: communications usage situations, 'mobile' usage situations. • Mobile communications normally occur at home (mobile at home/ 'Homezone'), on 'their way' (on the go) and hanging out with peers.	• Situational context • Location Based Usage • Location – related conditions • Usage
Abeele et al., (2014)	• Negative attitudes towards the mobile phone as a fashion symbol, as a display for popularity, and as a display of one's time poverty. • Three key lifestyle segments emerged; the trendy users, the engaged users and the thrifty users.	• Mobile lifestyle • Mobile culture • Youth lifestyle • Mobile fashion

2.7 Brief Summary of Lifestyle Research

The review on mobile-wired lifestyles has shed some interesting insights on the link between traditional lifestyle scales (e.g. AIO) and contemporary lifestyles. Whilst these emerging lifestyles are hugely informed by traditional scales, the very nature of mobile devices (e.g. ubiquity, single ownership and personalization, as well as localization: Zhou, 2011; Bauer et al, 2005) signals that a new way of thinking on lifestyles is needed in the mobile-wired era. Wired mobile lifestyles are slowly becoming routine, for example the coffee chain Starbucks and American based retailer Target have responded to these emerging mobile lifestyles by allowing their registered customers to receive text messages and mobile coupons entitling them to a rebate at any participating outlet (Butcher, 2010). Starbucks customers can also use their mobile phones to 'check-in' (announce their presence) at the coffee shop via social networking sites such as Foursquare (Lammarre, Galarneau and Boeck, 2012, p.1), pay for their coffee using their mobile phone (e.g. Apple pay) as well as compete with friends and other patrons for coupons and special recognition (Miller, 2010).

In addition, consumers can also receive personalised location-based promotions via their mobile phones as soon as they enter selected stores (Lamamare et al., 2012). Unlike general e-lifestyles, which may be restricted to fixed locations, wired mobile lifestyles present new situational contexts as larger numbers of consumers carry their mobile phones everywhere daily. This demands a new perspective on lifestyles that blends personal psychologies, social dynamics, location and media access factors (see Karnowski and Jandura, 2014).

2.8 Rationale for Lifestyle and E-lifestyle Research

Several scholars (Brengman et al., 2005; Ahmad, Omar and Ramayah, 2010; Yu, 2011; Chiu et al., 2014) have paid attention to lifestyle and e-lifestyle research. These studies principally focus on cross cultural validation, comparison of e-lifestyle studies, scale construction and validation and scale adaptation. Some scholars examined situational and contextual elements driving mobile lifestyles. For example Lee et al., (2009), Hassan et al., (2011) and Abele et al., (2014) explored the structural and functional use of mobile lifestyles and link to lifestyles. In addition, Ahmad, Omar and Ramayah (2010) and Karnowski and Jandura (2014) looked at

wired lifestyles and situational contexts of mobile use in different contexts. Limitations (i.e. research) of some of these studies are also listed in Table 2.8 (Research Gap Summary).

Table 2.8: E-lifestyle and Lifestyle Research Gap Summary

Research Gap	Author
Less studies have explored emerging lifestyles	Bruner II and Kumar, (2007, p.3)
complexity in changing consumer habits (e.g. transumers)	Caddy (2016); Galletley (2016)
Relatively few studies focusing on e-lifestyle	Yu, Li and Chantatub (2015)
Relatively few studies on LBS (14), LBA (3), Mobile Lifestyles (M-Lifestyle) [2] and E-lifestyles (5)	***See also Table 2.2***

As seen in Table 2.8 extant research provides some generalised insight into the role of consumer lifestyle and e-lifestyle as well as consumer response in mobile marketing encounters. However, knowledge of actual consumer response patterns and the role of e-lifestyles in individual consumer response to LBS is limited. We have observed in this chapter how relatively few studies focus on e-lifestyle (See Yu, Li and Chantatub, 2015) as well as complexity in changing consumer habits (Caddy, 2016; Galletley, 2016). Hence this study attempts to uncover how e-lifestyles and situational context may influence consumer response to LBS. Next, chapter three provides a contextual analysis concluding with a summary of research gaps for this PhD study.

Chapter 3

Research Context

Figure 3.1: Contextual Chapter Outline

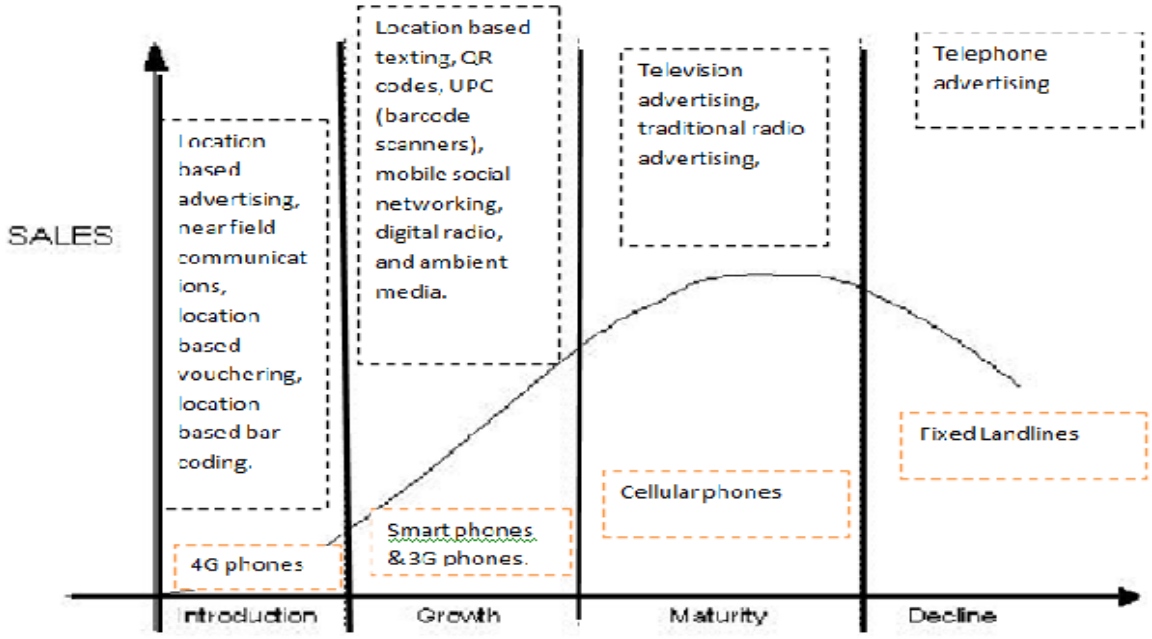
3.0 Introduction

The chapter commences in Section 3.1 with an outline of how multiple device use links with changing consumer lifestyles and is leading to new ways to reach consumers. Section 3.2 then identifies LBS developments. This is followed by an outline of LBS formats, applications and providers in Section 3.3. A review of theoretical perspective on LBS is offered in Section 3.4, while in 3.5, the key frameworks used to analyse LBS have been outlined. Next, section 3.6 considers barriers to LBS growth followed by section 3.7 with an outline of a preliminary research framework (See Figure 3.12). The chapter concludes with section 3.8 highlighting research gaps (combined from chapters 1 and 2).

3.1 Multiway Communication in Mobile Marketing and LBS Developments

The rapid growth in mobile marketing (MM) has resulted in new ways of reaching and communicating with target audiences effectively. In easing the confusion caused by the search for goods, access to web services can improve the consumption experience (Rao and Minakakis, 2003). The mobile marks a further departure from traditional marketing where retailers relied to a significant degree on mass communication and push strategies to encourage consumers to enter retail spaces. Banerjee and Dholakia (2008) see mobile marketing as bridging the information gap between consumers and the availability of market place offerings. In contrast to mobile advertising, traditional advertising formats have reached maturity, as have roadside billboards, print adverts and direct mail (Keynote, 2012). This is illustrated below in an adapted product lifecycle diagram, Figure 3.2.

Figure 3.2: Hybrid Product Lifecycle for the Advertising and Mobile Sectors



Source: Adapted Product Life Cycle model (Kotler, Armstrong, Harris and Piercy, 2013), developed by Researcher for this study

Given the nature of a concentrated mobile market, a mature advertising market and the growth in an empowered mobile savvy consumer, marketers are continually seeking ways to gain or maintain a share of voice as well as market share. This case for an empowered and savvy customer is well stated by Hong and Tam (2006) and Chang and Heng (2006- In Huang, Hsieh, and Chang, 2011, p.17) who posits that, *"In recent years, mobile phones, together with other handheld devices or mobile appliances (such as PDAs), has deeply influenced people's lifestyle mainly because it empowers people with its ease of use "anytime and anywhere".* Scharl, Dickinger and Murphy (2005) identify how mobile marketing uses a wireless medium that enables consumers to receive time and location-sensitive tailored information about products and services. To the consumer, the mobile phone has become central to their daily lives, a personal device that enables them to stay connected anywhere and anytime and is, to some extent, a statement of individuality that offers a means with which to enhance private and social lives (Persaud and Azhar, 2012). Per Shankar and Balasubramanian (2009), mobile marketing is a two- way or multi-way communication and promotion of an offer between the consumer and firm using a mobile device. The MMA, (2014), defines mobile marketing as *"a set of practises that allow organizations to talk and engage with their customers in an interactive and appropriate way using any mobile device or network".* The mobile device benefits from unique attributes such as ubiquity, interactivity, speed of communication, personalization and localization (Yousif, 2012). Put differently, Balasubramanian, Peterson and Jarvenpaa (2002) note how it offered consumers accessibility to services independent of time and space. Mobile phones are normally owned by one person thus making them an ideal medium for tailored location oriented products and services (Bauer et al., 2005; Zhou, 2011)

Shankar, Venkatesh, Hofacker and Naik, (2010) acknowledged the mobile device as a personal accessory carried on the person at all times- with access to content anywhere without the need for physical connection. While traditionally, consumers have used mobile devices to make and receive calls (Carroll, Barnes, Scornavacca and Fletcher, 2007, Varnali and Toker, 2010; Shankar et al., 2010), this is rapidly changing Strom, Vendel and Bredican (2014) note the transition from laptops to mobile devices initiate search or respond to advertising messages whilst on the move. Chiu, Kim, Lee and Won, (2014), noting this change in lifestyle see the potential for new behaviours given the unique integrated features of the mobile device (e.g.

GPS, scanners and camera). Mobile devices are now embedded into the lives of consumers, who use devices to multitask, shop, bank online, socialize and access entertainment services.

The mobile industry has evolved at an incredibly fast pace and smartphones have become the hub for peoples' digital lives (Bhavnani, 2017). The UK was second after South Korea in terms of the number of public Wi-Fi hotspots (see Figure 3.3) showing the growth in enabling infrastructure for LBS as well as opportunities to provide consumers with timely offers and services via the mobile device. Given the increased uptake of mobile devices (e.g. in the UK, adoption rose to 72% in 2014 according to Mintel, June 2014) and the global Wi-Fi market is predicted to be valued at 30 billion by 2020 (PRNewswire, 2015). Such growth is predicted to result in widespread Wi-Fi availability.

Figure 3.3: Worldwide Location Highlights: Public Wi-Fi Locations

Q3 Rank	Country	Q3 2013 Number of Locations	Q2 2013 Rank	% Change
1	South Korea	186,758	1	0.0%
2	United Kingdom	182,654	2	+ 0.03%
3	United States	143,616	3	+ 3.6%
4	China	104,106	4	0.0%
5	France	35,432	5	0.0%
6	Taiwan	24,147	6	0.0%
7	Russian Fed.	16,829	7	0.0%
8	Japan	15,735	8	0.0%
9	Germany	15,108	9	0.0%
10	Sweden	9,545	10	0.0%

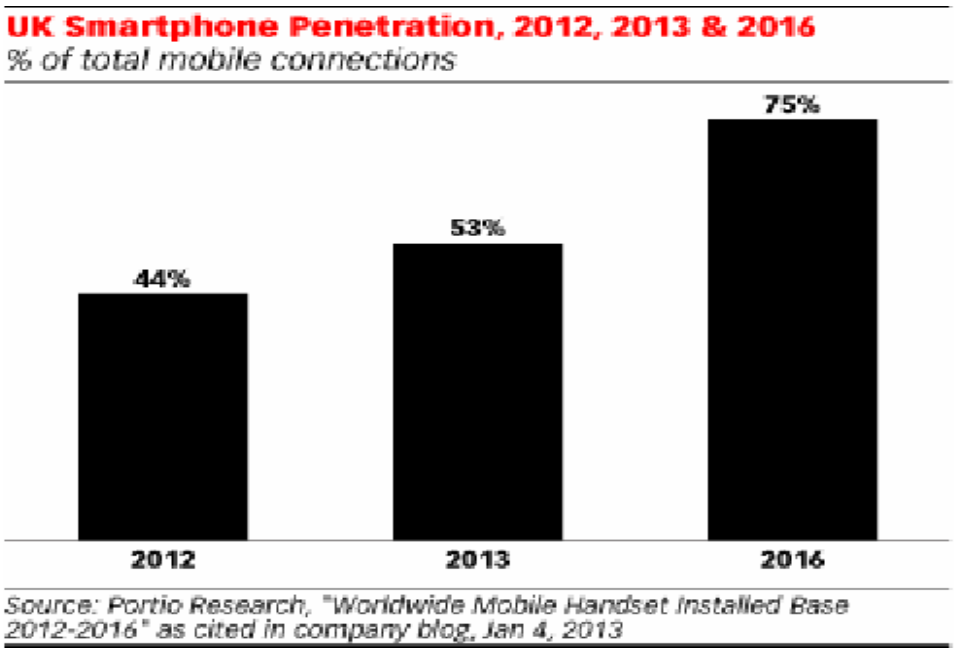
Source: JiWire, Q3 2013

At the same time, there is growing use of mobile beacons that used GPS to deliver targeted promotions and advertisements (Petro, 2015). In a mobile audience insight report by NinthDecimal (2013), it emerged that 69% of consumers are happy to receive information from their retailer on their mobile devices while in-store. Of these shoppers, 65 % stated that they would add products to their shopping lists after seeing a mobile advert (NinthDecimal, 2013). A related report by e-Marketer (2015) expressed that UK adults spend almost 3 hours per day consuming media, showing how mobile devices are central to people's lives. Furthermore,

smartphones, smart watches and Google glasses because of wireless capabilities; can be customised based on time, location and profiles of consumers (Feher, 2014).

According to E-Marketer (2015), the UK is leader in mobile adoption and mobile phone advertising, with strong increase in smartphone penetration predicted to reach 75% by 2016 (Figure 3.4). In addition, UK mobile advertisement spending was predicted to rise by 35 % in 2016 to reach just over £ 91 billion (E-Marketer, 2016). This growth provides that much needed medium for innovation (e-Marketer, 2013) which marketers are eager to utilize to reach customers. There is however, a challenge for markets to understand how consumers are engaging in mobile shopping behaviours so that strategies and services can be tailored accordingly to exploit the shifting market trends (Donovan, 2013).

Figure 3.4: UK Smartphone Penetration (2012-2016)



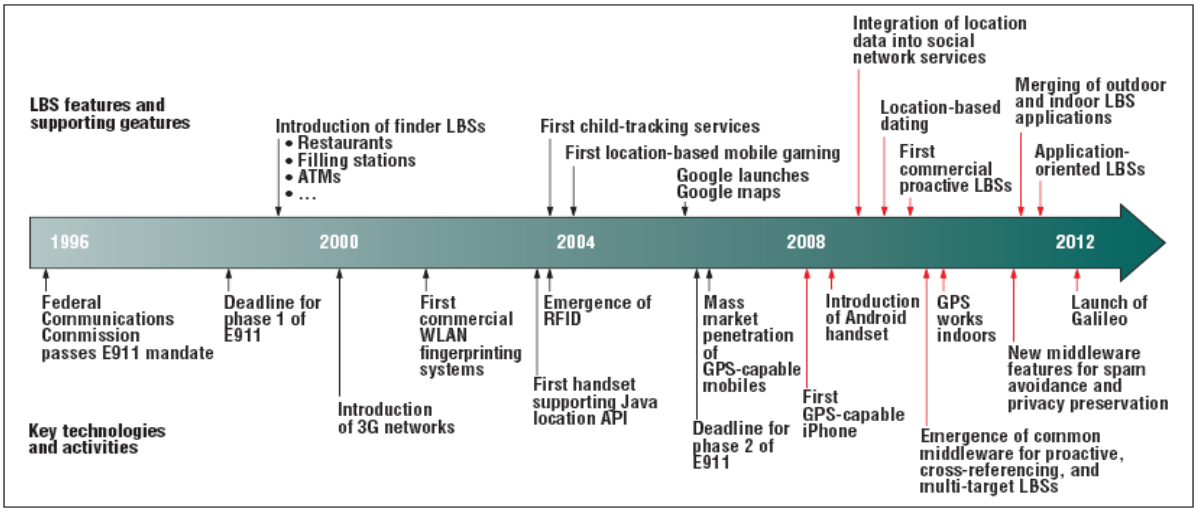
The rapid growth in mobile marketing (MM) has resulted in new ways of reaching and communicating with target audiences effectively. Per a Gartner report (2014), the mobile advertising market was predicted to be worth $41.9 billion by 2017. Such growth comes at a time when there is a rise in adoption of smartphones, tablet devices and related advertising spend. For example, smartphone's account for 76% of all handsets (IABUK, 2014), and mobile ad spend grew by 93% to £1.03 billion in 2013 up from £529 million in 2012 (IABUK, 2014). Furthermore, research has indicated that consumers are spending approximately 15 hours a

week researching on products using their smartphone's (apigee, 2013) and 93 % of these consumers end up buying products using mobile devices. Such phenomenal growth and adoption patterns come at a time when sales of wearable technological gadgets are expected to grow. E-Marketer (2014) predicted that wearable smart devices (e.g. smart glasses, smart watches, wearable trackers) will grow to 64 million units by 2017 (from 3.1 million in 2011).

3.2 Evolution of LBS

Literature (Rao et al., 2003; Bellavista and Kupper, 2012) contend that LBS originated in 1996 with the E911, a US mandate that compelled operators or carriers to accurately position emergency wireless calls. In Europe, the European Commission started an identical pursuit in 2002 with the introduction of a Directive for Mobile Communication, of E112. Both E911 and E112 originally designed to offer exact location coordinates to emergency control centres. However, owing to high infrastructure costs, service providers soon launched commercial LBS. Typical LBS included finder services aimed at delivering details on nearest points of interest (e.g. service station, restaurants), fleet management and tracking pets. However, due to a lack of interest and inadequate position systems such as cellular technology (Cell-ID positioning), the services did not take off until around 2005. A timeline of LBS is shown in Figure 3.5 below.

Figure 3.5: LBS Timeline (1996 – 2012)



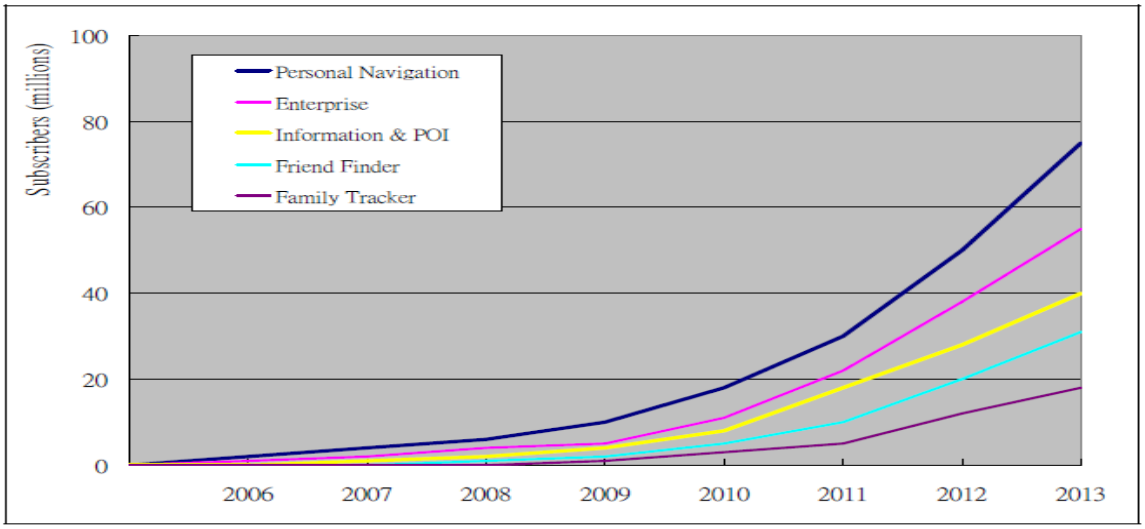
Source: Bellavista and Kupper (2012).

Starting from pioneering days of LBS (pre-2005), services were mainly targeted at a single individual (e.g. tracking inventory on a map). Developments in technology infrastructure after

2005 such as GPS, 3G, LBS middleware technology and Web 2.0 precipitated the increased growth of LBS (Figure 3.5). Figure 3.5 shows how agile technologies (e.g. GPS, 3G, and mobile cell identity techniques) have transformed the LBS landscape up to 2012.

In the last five years, consumers use GPS facilities on their mobile devices for navigation while yet others use location capabilities to show their friends where they have been (e.g. via Instagram and Foursquare). In many cases, as the consumption patterns become routine, they become embedded in lifestyle patterns that respond to LBS. Nearly 80 million global subscribers were registered for personal navigation services in 2013.

Figure 3.6: Worldwide LBS Adoption Rates



Source: Adapted from Huang, Hsieh, and Chang, (2011), Worldwide LBS adoption 2006 to 2013.

As seen from Figure 3.6, personal navigation is the most widely-used service; other uses include Information and POI, Friends Finder and Family Tracker. Bellavista and Kupper (2012: p 4) noted changes to LBS, identifying on the one hand, a move from reactive to proactive formats and on the other, a change from self to cross-referencing. In more proactive LBS, the user initiates the service by requesting information such as nearby hotels. In reactive LBS, the user receives location services as soon as they enter a place of interest (e.g. if registered with Marriot hotels, the customer gets a reminder of forthcoming offers), when they get within a predetermined radius of the hotel. The convergence of ICT and mobile technology

favours the implementation of the proactive approach: location centres and functions on the devices and widespread connectivity.

Self-referencing LBS refers to those services where the user requests services whereas cross-referencing relates to services which exploit the coordinates and personal info of an individual to target them with location information. Where the latter is used, concerns for privacy have been expressed. For example, Bellavista and Kupper (2012) asserts that targets for cross-referencing LBS should restrict access to their location to a limited number of relevant service providers.

In addition, contemporary LBS approaches aim to detect multiple target positions, not just one individual. This is significant in location based social networking (LBSN) where various members of an online social group can be tagged simultaneously and sent an LBS message. An example is provided by Zheng (2011, p.24) who states:

"For example, users can upload location-tagged photos to a social networking service such as Flickr, comment on an event at the exact place where the event is happening (for instance, in Twitter), share their present location on a website (such as Foursquare) for organizing a group activity in the real world, record travel routes with GPS trajectories to share travel experiences in an online community (for example GeoLife), or log jogging and bicycle trails for sports analysis and experience sharing)."

A further development is the shift from content-driven LBS to application oriented services. Traditionally LBS services delivered information (e.g. point of interest and maps) to users based on their location via browsers or short messaging services (SMS). The new approach relies on sending tailored applications (apps) delivered dynamically and directly to users. Bellavista and Kupper (2012) acknowledge the value of LBS apps in delivering context specific LBS anytime and at any place: enhancing overall customer experience. At present, the increase in Wi-Fi connectivity, the introduction of i-beacons, location -enabling functions on smartphones and Bluetooth all point to LBS becoming more versatile in format and in targeting approaches. With increasingly mobile consumers, LBS is likely to rely more on a cross-referencing approach- this is relevant to this study as the focus is on customer response to unsolicited LBS and on how emerging e-lifestyles can influence response as LBS becomes even more app-oriented.

The convergence of information technology and new services such as LBS and retail apps has bought new retail solutions to consumers. Gartner (2014) notes how the mobile advertising market is predicted to be worth $41.9 billion by 2017. With the growth in mobile apps, apps are acting as commercial sites where consumers can search for, purchase goods or get directions of nearby store locations (The Mobile Marketing Association: MMA, 2014). The emerging location centred approach enables pull strategies whereby consumers can request for content (e.g. information and directions) from service providers and enter the retail space anytime, and anywhere. The value of LBS is the ability to deliver content based on the exact location, characteristics and profile of the consumer whilst simultaneously enhancing customer experience. With the emergence of LBS, there is potential for new behaviours given the integrated features of mobile devices.

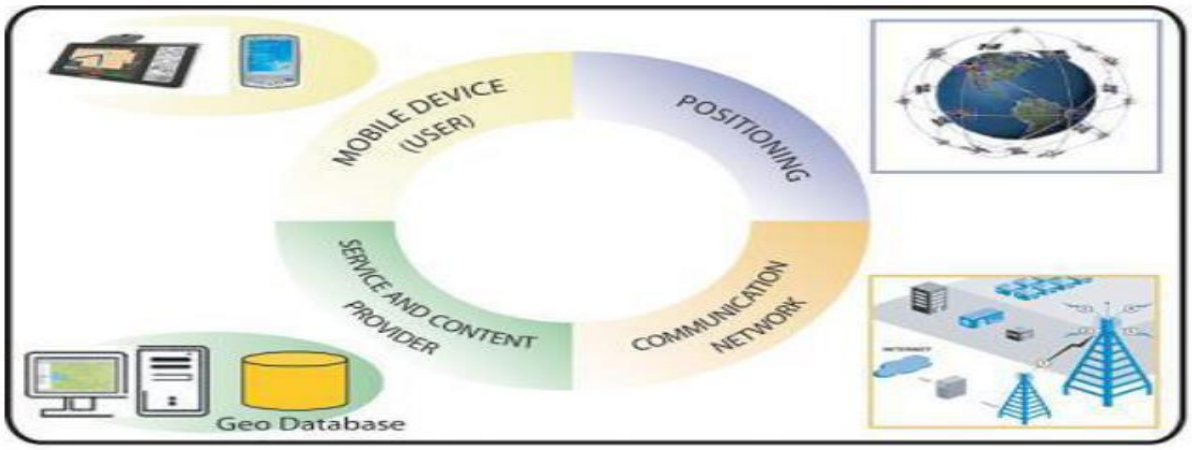
One of the main themes in mobile marketing research has been the need to establish why and how people respond to mobile advertising messages. One perspective is that owing to consumers being time poor and mobile, they search for ways to reduce the problems when using services by seeking better access and convenience. Therefore, cconsumers' are *"…looking for more comfort, fewer problems, lower additional costs and less trouble caused by the use of goods and services …as they seek for better value"* (Gronroos, 2010, p.11). Consumers are leveraging their mobile devices as access points to obtain required services and LBS fits into this need – LBS is directly linked to changing consumer lifestyles through routine mobile device usage.

3.2.1 Defining elements of an LBS system

Junglas and Watson (2008) define Location Based Services (LBS) as any service that uses the geographic location of an entity (object requesting information). A further definition by Ratti and Frenchman (2006) sees that LBS is 'set of applications that use the geographical position of a mobile device to provide services tailored to that information. Typical LBS include information and directory services, tracking and navigation, emergency services, mobile location check in services and location based advertising (Dhar and Varshney, 2011, Zhou, 2012). LBS date back to 2001 when location tracking was introduced in Japan (Dhar and Varshney 2011). In the UK, LBS have been widely used in the justice system where released prisoners are tagged to monitor their movements (Thomas, Little, Briggs, McInnes, Jones and

Nicholson, 2013). LBS rely on a system or infrastructures to function, which are mobile devices, wireless networks, location sensing and servers (see Figure 3.7).

Figure 3.7: Basic components of the LBS System



Source: Steiniger et al., (2008)

As illustrated in Figure 3.7, the LBS ecosystem can be broken down as follows;

- Mobile devices comprising the means with which the user requests and receives required information in the form of text, pictures, maps or videos (Almasri, 2013). The growth in the adoption of Smartphone's and increases in public Wi-Fi hotspots appear to support these services. Furthermore, the new mobile devices come equipped with built in Global Positioning Systems (GPS) widely used today for navigation purposes (Irfan, Tahir, Baig, Khan, Hashmi, Shehzad and Ali, 2009).

- Wireless networks that transmit information and services from the LBS server to the user and from user to the LBS server (Almasri, 2013).

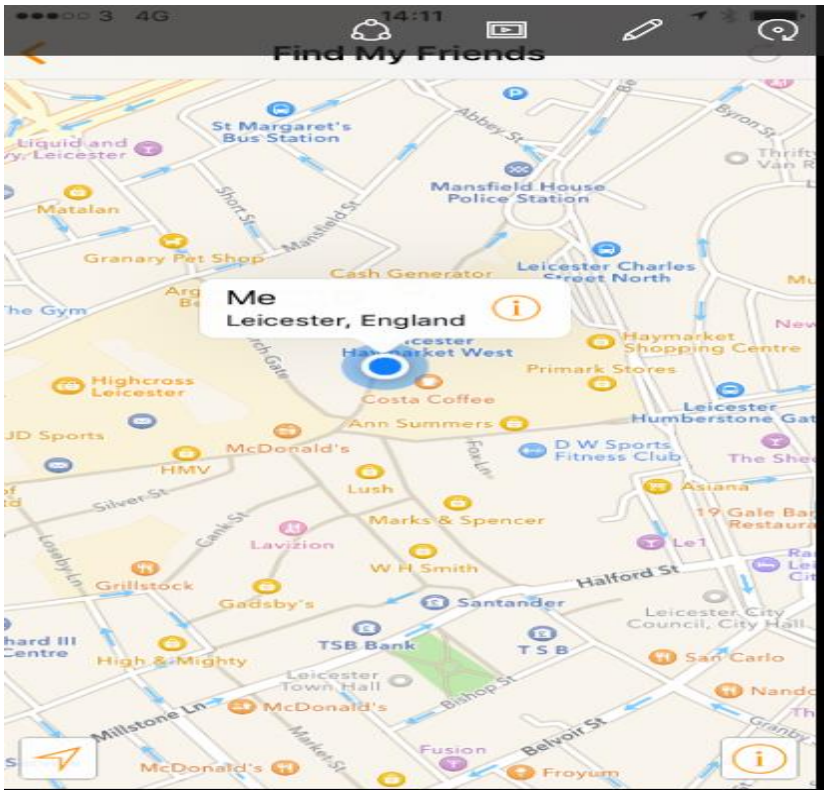
- Location sensing that determines the physical location or position of the user using mobile network cell triangulation and satellite positioning (Almasri, Alnabhan, Hunaiti and Sedoyeka, 2009).

- LBS server, an important component of LBS storing all data (Almasri, 2013).

The nature of LBS is such that consumers are provided with context related information based on their location and preferences (Dhar and Varshney, 2011). Such personalised services have the potency of delivering enhanced experiences to consumers hence LBS have been termed the 'killer application of mobile business' (Junglas and Watson, 2008; Zhou, 2012; Zhou, 2013). There are two variations of LBS - reactive and proactive (Kipper, 2005). Proactive LBS is controlled by the user who activates the location function or service and requests information or services; the service provider can take account of their location before responding to the request. In contrast, reactive LBS automatically activate as soon as the user enters or passes through a place of interest such as a shopping centre. While proactive LBS involves user tracking once (when they request information), reactive LBS requires constant tracking of the user to provide services tailored to that location.

3.3 LBS Formats, Applications and Providers

Figure 3.8: Apple Location Tool

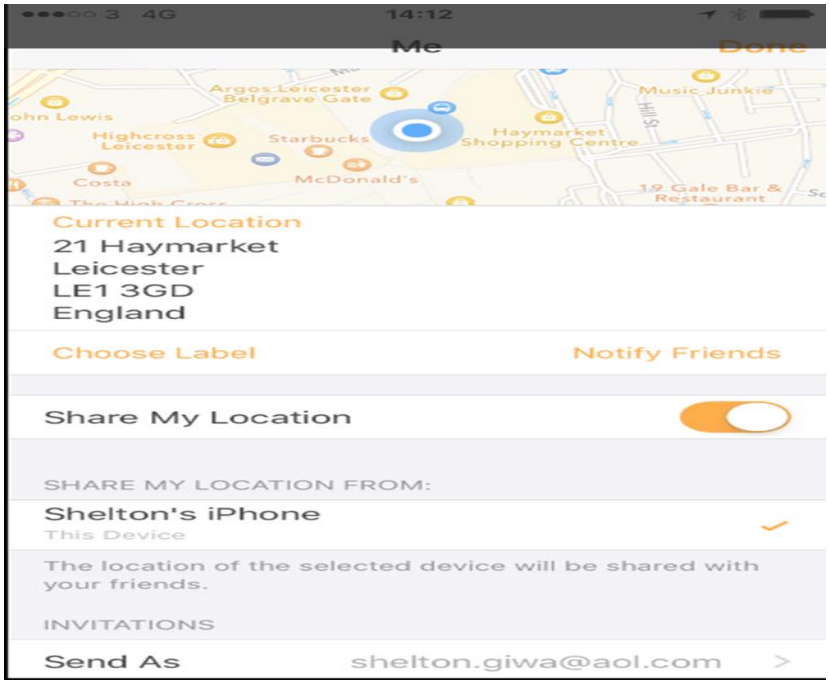


Source: Apple iPhone screen shot

We can categorize different forms of LBS, based on type of information sought (customer need) as well as the type of information that can be delivered. Rao et al., (2003, p.64-65) identified four types of LBS applications: Where I am, Point of Need Information, Specialist Consumer Applications and Industrial and Corporate Applications. Where I am is the most established LBS whereby consumers request location information and directions from services providers, (driving directions, directory/ yellow pages in an area, real time traffic alert- see Figure 3.8).

Rao et al., (2003) posit that Japan leads in this type of LBS while the US is slowly catching up. Due to improved GPS capabilities, such services are developing rapidly in the ULK. Point of Need Info Delivery – relates to usable, personalised information tailored to consumer needs which could be for nearest restaurants, service stations, banks, bus stations, as illustrated in Figure 3.9.

Figure 3.9: Apple Point of Need Image



Source: Apple iPhone screen shot

Nearby service providers would access customer profiles and preferences to enable the provision and delivery of context specific products and services (see Figure 3.8). This depends

on access to consumer databases. Aimed at unique micro segments, specialist applications meet demands of either individual or business consumers. Per Rao et al., (2003) typical target segments are sports enthusiasts who require specialist apps for finding a golf ball, finding friends at social events or tracking children in the case of parent carers.

The last type of LBS app enables businesses to track material, people and products in real time. These apps have also benefited from the connectivity and technological revolution for example bar code technology (RFID), Bluetooth and Wi-Fi. This is seen as an area of great potential, with developments through ambient intelligence or pervasive computing: all products fitted with smart sensors. The significance of these sensors lies in the ability to sense customer needs and deliver them intelligently independent of time and space. Whilst corporate apps represent promises of better targeting, research (e.g. Yousif, 2012) has indicated consumers' reluctance to give up their information or independence for the sake of offers or tailored information. Consumers however desire a superior customer experience (Rao et al., 2012) and it is yet to be established to what extent they are willing to sacrifice their privacy for tailored services.

An analysis of the four types of LBS has shown the value of adopting LBS by businesses as a means of gaining competitive advantage in an increasingly fragmented market. To the consumer, LBS promises to provide tailored context specific products and services in real time. Due to the ability to tap into emerging e-lifestyles, it is likely that 'specialist' LBS apps could relate to segments yet to be explored.

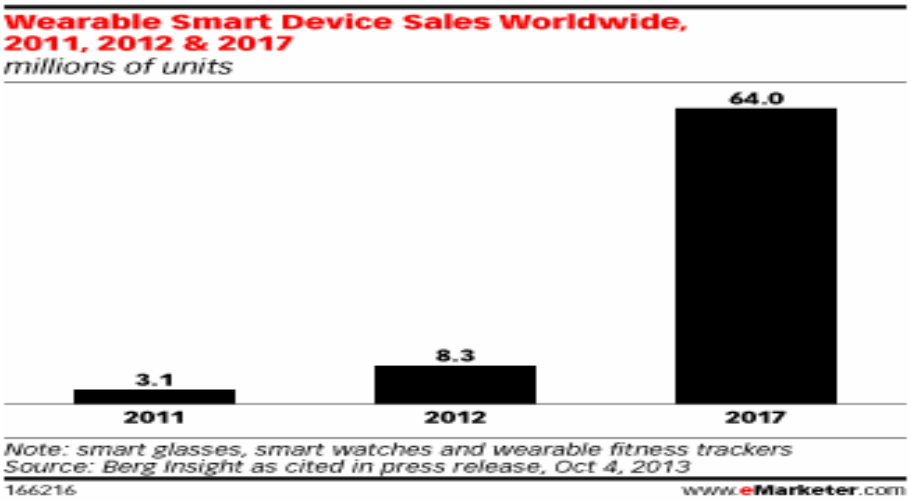
LBS is widely used to enhance tourist experiences. Ratti et al., (2006, p.729) observed the potency of LBS as the enhancement of access to location data for services such as, *"…cyber city tours, navigation aids, applications to ease the touring of historic sites and other community-based environments."* LBS is an area ripe for student segments - empowered student consumers seek convenience in their search for products and services. The use of location data to deliver customer value, has gained renewed interest recently in the UK with the development of a virtual assistant called "Sherlock" at Cardiff University that can answer student question using their location coordinates to direct them to relevant services (Wakefield, 2015: In the BBC). Key functions of LBS, according to Ratti et al., (2006, p.730) include a) distributed chats and friends tracking: (e.g identifying friends in the same area with alerts (text message); b) traffic services (traffic updates delivered only to a specific group to inform of any

roadworks or delays and suggestions for alternative routes; digital tapestries (where members of a group can attach information (e.g. pictures, videos) to a specific geographical location and others retrieve the data when they pass through) and Co-ordinated actions: here special interest groups can adapt to changing environmental situations in real time.

Mobile applications (apps) appear to be increasing rapidly thereby promoting the usefulness of LBS as well as enhancing adoption (Shankar et al., 2010). Gartner (2014) predicted that annual app downloads would reach 268.7 billion times by 2017 with an estimated revenue of $77 billion thus making apps one of the most popular IT tools worldwide. Most apps are free (94.5%), allowing customers to have free access to apps if they allow advertisers to reach them with tailored content (Zhou, 2011). For example, a fifth (21%) of 16-24 year olds is willing to share their content and location information to receive real-time communications on their Smartphones (Mintel, 2014). Mobile apps are now the leading channel in delivering content and services to consumers as well as enhancing customer engagement (Diorio, 2016). De Mers (2016) observed that the emergence of apps is replacing traditional business operations as well as predicted growth of app streaming.

This comes at a time when customer expectations are continually changing in the digital era: increasing demand for instant virtual satisfaction. For example, the Shopkick app enables customers to automatically redeem rewards and product discounts as soon as they enter the catchment area of participating retailers. Where apps and vouchers are used by 'technological savvy' customers, this has resulted in a better customer experience. Apps vary in rationale – some typical apps enable customers to 'check in' to a location to receive offers (e.g. Foursquare and Pinterest, and SCVNGR); other location-aware apps allow consumers to create shopping lists as well as receive alerts on offers matching their list. For example, high end clothing retailers Mango launched their m-commerce app that enabled customers to shop on their mobile as well as locate nearby shops (MMA, 2014). Other Smart apps can customize information for a specific need e.g. recipes for Weight Watchers customers tailored for individual budget, nutritional plans and medical conditions (MMA, 2014). Such apps are predicted to drive mobile advertising growth.

Figure 3.10: Wearable Smart Device Trends



Source: E- Marketer (2013)

Some key challenges facing LBS providers include practical handset issues; hardware development challenges; (geo fencing: The Futurist, 2011); the limited reach and fragmentation of industry (Anderson, 2013) and privacy concerns. Practical barriers to LBS development, according to Shankar et al., (2010) include the small screen size of most smartphones; shorter transfer speeds on mobile devices (e.g. transfer of 3D images or virtual reality); pricing- prices for wearables are high and network operators charge differently for voice and data services- although, with 4G, such charges may fall in the future. In considering infrastructure, The Futurist (2011) noted how location based vouchering relied on the availability of sufficient hardware and physical infrastructure to 'check in' customers; however, LBS also require the use of geo-fencing to locate users- how to reach only those users within a retailer's location. In contrast, Anderson (2013) cites the difficulty in reaching geographically dispersed areas with concerns that consumers might be overwhelmed by unwanted LBSs (e.g. location based adverts). There are several small operators (fragmented) developing services but this may not be stable. Despite the practical and infrastructure challenges, it is likely that more LBS apps will be developed with potential to enhance customer experience or generate customer value. Where a more serious issue that will influence the development of LBS will be the privacy concern. This is addressed in Section 3.6.

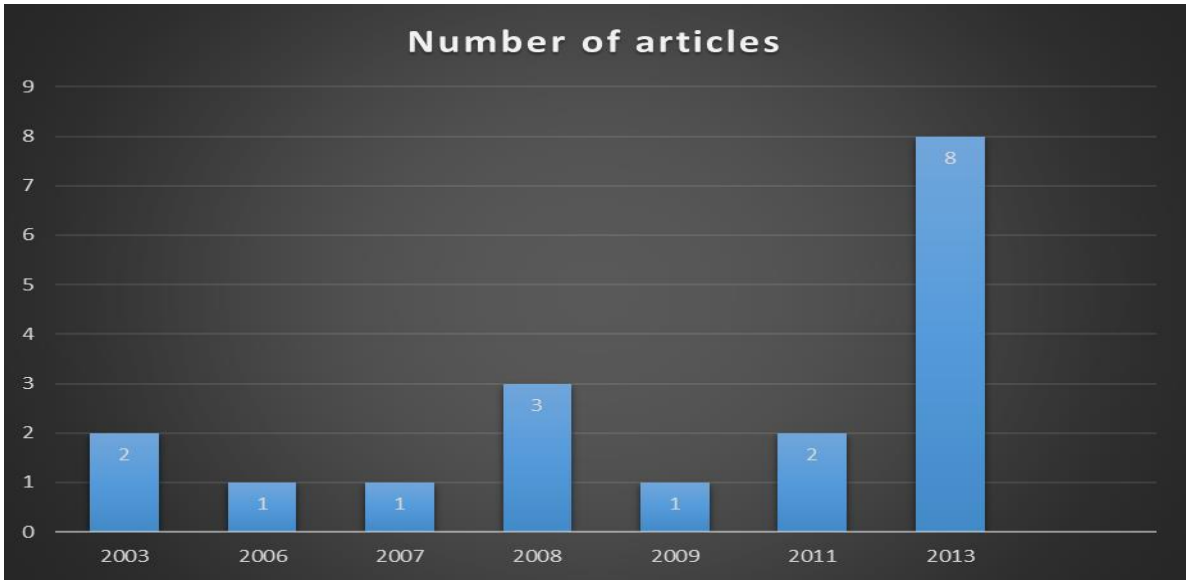
3.4 Theoretical Development in Studies of Location Based Services

This section focuses on LBS studies from 2003 to 2016 (see Table 3.11). Section 3.4.1 reviews studies that define and develop the LBS concept while section 3.5 summarizes the approaches taken in prior studies when investigating and empirically researching LBS. Section 3.5.1 seeks to explore issues of consumer privacy. The section then concludes with a preliminary framework for this PhD study.

3.4.1 Studies that defined and developed LBS

2003 marked the inaugural period for LBS studies; only two pioneering studies were recorded in 2003; with a steady growth in LBS literature, as shown in Figure 3.11. An initial review of LBS literature shows a change in focus of studies between 2003 and 2013. There is a clear distinction between studies that define and develop LBS in the earlier years (2003 to 2010). Dhar and Varshney (2011) noted how early studies focused on early challenges of LBS and developing LBS business models. Gidofalvi et al., (2008) took a different approach, focusing on the estimation of the capacity of mobile location based advertising in delivering context and location specific information and content. Unlike previous studies (Steiniger et al., 2008) that classified LBS, this study adopted a two-pronged approach focusing on LBS in general and more specifically on LBA. Since 2011, studies began to consider consumer antecedents and a wider view of LBS (see Figure 3.11). For instance, Dhar and Varshney (2011), and Xu et al., (2011) separately focused on the effect of context awareness and personalisation on the adoption of LBS whilst Zhou (2012) investigated user adoption of LBS in China using the UTAUT theory adopted from Venkatesh et al., (2003). In a similar break form earlier research, Weiss (2013) investigated consumer adoption of LBS and apps focusing specifically on gratifications and value for teenagers while Zhou (2013) introduced the Flow concept into the study of LBS. Zhou (2013) contended that as LBS continues to gain prominence, more studies would start addressing enablers and inhibitors of LBS. This is evidenced in extant literature by the growing trend of studies that adopt the personalisation and privacy lens in LBS use (see Anuar and Gretzel, 2013; Yun, Han, Lee, 2013).

Figure 3.11: Trends in LBS Literature



Source: Developed for this study

Since 2013, as LBS continue to evolve in line with mobile connectivity, the focus of these studies appears to shift to reflect changing consumer lifestyles. One such change is evident in the work of Yu et al., (2013) who investigated the impact of perceived value on user satisfaction and behavioural intention to use Location Based Social Networking (LB-SNS). Yu et al., (2013) observed that hedonic value had the strongest relationship in terms of satisfaction with LB-SNS. This contrasts with utilitarian value, which did not influence behavioural intention to use LB-SNS. These findings diverge from earlier findings by Lee et al., (2009) and Zhu et al., (2008) who found that both utilitarian and hedonic value had influence on behavioural intention to use mobile oriented services.

3.5 Frameworks used to examine LBS

In looking at the kinds of frameworks that have been used to examine LBS, we can look initially at technology adoption frameworks. For decades, adoption studies on technology were used to gain insights into the diffusion of technologies and to forecast the acceptance of technology based products/services. In the sociology field, Rogers' Innovation Diffusion Theory (IDT, 1995) developed in 1962 has been used for such research. From a social psychology perspective, the Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB),

Theory of Reasoned Action (TRA) and Unified Theory of Acceptance and Use of Technology (UTAUT) have been widely used in investigating consumer adoption of innovation. These theories explore attitudes that regulate individual acceptance of an innovation (e.g. new technology) and researchers often modify the theories to fit emerging research contexts.

Some of the above key theoretical frameworks have dominated early attempts to examine LBS; firstly, the IDT theory, then the TAM and UTAUT theory. It is not within the scope of this research to examine each of these frameworks in detail- here, we can look briefly at how those theories have been applied to mobile marketing and LBS related studies. Firstly, the Diffusion of Innovation theory by Rogers (1995) seeks to predict how individuals adopt new products/services. Rogers (1995) posited that individual adoption of innovation is contingent on attributes such as relative advantage, compatibility, complexity, trialability and observability.

For the adoption of LBS for example, the compatibility aspect of the IDT framework might link with lifestyle (traditional lifestyle e.g. AIO) framework as it focuses on the degree of fit between individuals' existing AIO and the innovation. Extant research (Purcell, Rainie, Rosenstiel and Mitchell, 2011) has indicated how the adoption of mobile phones in the US was based on factors such as convenience, accessibility and mobility thus potentially reflecting some attributes of IDT. Rodgers (1995) suggests that once an individual adopts technology in a cluster, they are likely to adopt other similar innovations. With LBS, it might be assumed that individuals who use laptops to access online info might embrace being able to access online offers information 'on the go' using their mobile devices. Individuals who have used standalone GPS are prone to access the same on mobile devices. Weiss (2013) in a study investigating the adoption of new apps and LBS amongst young adults observed that prior ownership of other technology devices such as PCs likely influences adoption of innovative products (e.g. new apps and LBS for news purposes).

The TAM is a framework that focuses on individual behavioural response to an innovation or adoption of new service/product. Venkatesh, Davies and Morris (2007) posit that this framework has been widely used to provide explanatory value in IT usage. The TAM, designed by Davies et al. (1989) is based on two generalised beliefs: assessing perceived usefulness (PU) and perceived ease of use (PEOU) which may influence adoption.

Table 3.1: **Summary of Key LBS Studies**

Author(s)	Focus	Keywords
	Studies that built/Classified LBS 2000-2008	
Kaasinen (2003)	Evaluating user needs for location-aware mobile services	Location – aware services, Mobile Services, Usability, User Evaluation, User Needs, Attitudes
Rao & Minakakis (2003)	Definition of LBS, Evolution of LBS from business to consumer use	LBS, Location, Customer Value, Privacy Concerns
Ratti et al., (2006)	Classification of LBS for individual consumers as well as groups	Mobile landscapes, Location data
Burner et al., (2007)	Description of LBA, and provision of an Alba measurement scale	LBA, Mobile Advertising
Junglas and Watson (2008)	Evaluating the perception of users regarding location tracking and location aware services	LBS, Measured performance, Usefulness, Ease of use, Perceptions
Steiniger et al., (2008)	Tracing the foundation and uses of LBS	LBS, Context, Adoption, Privacy, User Preferences
Banerjee et al., (2008)	Exploring the effect of the location dimension on the acceptance of LBS	Location-based Advertising (LBA), Mobile Advertising, Advertising Context, Perceived Usefulness
	Studies that Developed/applied LBS theories 2009-2015	
Dhar et al., (2011)	Statement of the challenges and business models for mobile LBS and Advertising	LBS, LBA, Mobile Advertising, Personalisation and Context - awareness
Xu et al., (2011)	Explores the personalization privacy paradox	Location-aware Marketing, Personalisation, Attitudes
Zhou (2013)	User adoption of LBS in China	LBS, Privacy Risk, Trust, Flow
Yu et al., (2013	Developing a research model that explores users perceived value of, Location-based Social Networking service (LB-SNS).	Perceived Value, Hedonic Value, LB-NS, Social Value, Utilitarian Value
Gidofalvi et al., (2008)	Estimate the capacity of the mobile advertising channel	LBA, User characteristics
Weiss (2013)	Young adults use of LBS and new Apps on smartphones	Location-based apps, Adoption, Motivation, Gratifications, Value

Perceived usefulness refers to beliefs that use of a product or service enhances an individuals' ability to obtain information (Davies 1989). Perceived ease of use refers to the extent to which an individual perceives that using the system (service or product) will be relatively easy. However, Dabholkar and Baqozzi, (2002) and Yun, Han and Lee (2013) have criticised the TAM from a validity lens. Yun et al., (2013, p.218) observed that TAM is ill designed, "… to support the validity of the relationships among various external beliefs": or to reflect specific research contexts. Where TAM has been valuable in considering innovative technologies is in the mediating role of factors other than attitudes on behavioural intention and has been used in several contexts (see Venkatesh and Davies, 2000 for a version to include social influence; Pavlou et al., (2006) for a modified framework to investigate electronic commerce adoption).

More recent developments include an extensive review of extant theories by Venkatesh et al., (2003), from which the UTAUT emerged. The UTAUT is an enhanced and more reflective model developed by Venkatesh et al., 2003) to provide a more reflective model for predicting and understanding drivers of technology acceptance. Key variables of the UTAUT are performance expectancy, effort expectancy, social influence which affect intention to use while also including facilitating conditions (e.g. infrastructure). Furthermore, moderating variables such as demographic factors (age, gender), experiences and voluntariness of use were added. Yu (2013) credits the UTAUT model for providing a solid theoretical model for predicting the intention to use emerging technology. This is supported by Viscusi, Phillips and Kroll (2011) who used UTAUT in the banking sector.

As can be seen in Table 3.2 below, TAM and UTAUT are the mostly used theoretical frameworks in recent LBS studies and related innovation adoption studies. Innovation is any advance in technology such as smartphones, Wi-Fi hotspots, mobile banking and thus both frameworks have potential value. Gao et al., (2013) extended the TAM to the mobile marketing domain by adding individual characteristics (e.g. innovativeness, risk acceptance and personal attachment to wireless devices). Studies that used UTAUT include the investigation of the mediating role of perceived usefulness and perceived ease of use in LBS by Junglas et al., (2008); and the focus on consumer attitudes towards LBS by Zhou (2011 and 2012).

Table 3.2: Summary of Key Frameworks and Theories used in LBS related research

Source	Approach	Theory
Kaasinen (2003)	Mixed Methods Experiment & Interviews	Not stated
Rao & Minakakis (2003)	Qualitative	Not Stated
Ratti et al., (2006)	Quantitative Case study experiment	Not stated
Burner et al., (2007)	Quantitative	Alba Measurement scale
Junglas and Watson (2008)	Quantitative Experiment	TAM
Steiniger et al., (2008)	Qualitative Literature review	No theoretical frame applied
Banerjee et al., (2008)	Quantitative Experiment	No theoretical frame applied
Dhar et al., (2011)	Qualitative Literature review	No theoretical frame applied
Xu et al., (2011)	Quantitative	Exchange Theory
Zhou (2013)	Quantitative Survey	UTAUT
Yu et al., (2013)	Quantitative Survey	UTAUT
Gidofalvi et al., (2008)	Quantitative Experiment	Not theoretical frame applied
Weiss (2013)	Mixed Method 2- Content analysis 1x Survey	TAM

Numerous studies have used either the TAM or UTAUT in researching technology acceptance (see Weiss, 2013; Pedersen and Ling, 2002). Curtis et al., (2010) and Yun et al., (2013) cite the robustness of the TAM in predicting intention to use emerging technology. In a systematic review of 450 studies that either used or referred to the UTAUT, Williams, Rana, Dwivedi, and Lal (2011, p.9) observed, "*that UTAUT provides a useful tool by which to evaluate the potential for success of new technology initiation, and helps identify factors likely to influence adoption of technology."*

With the increased adoption of mobile devices (Yu et al., 2013), shifting lifestyles and the increased prevalence of location enabled devices such as smart watches, the UTAUT, which has been empirically validated in various contexts was considered as a framework of analysis

in the research context of this PhD. However, Yun et al., (2013) doubts the effectiveness of the TAM and UTAUT in exploring emerging trends such as LBS smartphone applications. When we look at the convergence of lifestyles with smart devices, the ability of extant models to predict unique lifestyles emerging from routine use of mobile device to access LBS is questionable. Well-established frameworks (e.g. TAM and UTAUT) have limitations when faced with new behaviours resulting from the convergence of technology (e.g. Smartphones) and emerging lifestyles. Lu et al., (2005) has criticised early adoption models (e.g. TPB) for lacking predictability thus only focus on internal determinants. Agarwal and Karahanna (2000) advocated for an all-encompassing framework capturing actual experiences of consumers. Of late, the UTAUT has been widely used in LBS related studies (e.g. Zhou, 2013; Yu et al., 2013) focusing on identifying drivers of technology acceptance (see Table 3.2). Just like earlier models however, the UTAUT and TAM do not address typical response behaviour.

Furthermore, frameworks such as UTAUT have not been used to explore acceptance- LBS behaviour goes beyond perceived ease of use, perceived usefulness use (e.g. TAM, Davies, 1989). While it may incorporate some elements of performance expectancy, social influence, age, gender, experience and voluntariness of use; Im, Hong, and Kang (2011, p.3) highlight limitations of those frameworks in capturing dynamic use of emerging information-driven services. Furthermore, this study departs from previous research; with less focus on technology acceptance and more on actual behavioural response. Both TAM and UTAUT are process models used to predict the process of adoption hence may not fully address actual behavioral response in LBS encounters. Pioneering models such as the TAM (Davies, 1989) and UTAUAT (Venkatesh et al., 2003) provide a generic basis on which to understand individual consumer adoption of innovation (e.g. new technology): explanatory value in general technology use. For example, the UTAUT (Venkatesh et al., 2003) and its predecessors TRA (Azjen et al., 1980), TPB (Azjen, 1991) and TAM (Davies, 1989) explore LBS using technological lenses. Clearly, this study is not taking a technological perspective (acceptance of technology) nor adopting a rational decision-making stance (i.e. perceived ease of use and perceived usefulness) to the study of LBS as in previous studies (see e.g. Viscusi et al., 2011; Zhou, 2012). Instead, seeks to establish 'actual' individual consumer responses to LBS: a behavioural study of consumer response to LBS.

The review of the literature on lifestyle in Chapter Two has highlighted the need for a framework that can capture emergent lifestyle factors of consumers. This study seeks to gain insight into the effect of individual lifestyle on individual buyer patterns when confronted with LBS. As far as is known, extant models have explored these two areas separately (LBS and Lifestyles). This is echoed by Abeele et al., (2014) and Weiss (2013) who noted that limited predictions existed of how mobile lifestyles will affect specific individual search and response behaviours. While elements of the above models (IDT, TAM and UTAUT) may be relevant to LBS, as a new innovation it was considered that extant models did not have the capacity to fully address e-lifestyle variables, as set out in Section 2.5 of Chapter Two.

In the literature review in the previous chapter, the influence of lifestyle on individual response (Ahmad et al., 2010: Valentine and Powers, 2013; Abeele et al., 2014) as well as the inapplicability of traditional lifestyle scales (e.g. AIO and VALS) to contemporary shopping habits that centre on mobile device usage (Yu, 2011) was established in Chapter Two. Bruns and Jacob (2014) corroborated this view, criticising the current passive nature of LBS studies that tend to visualise individuals as passive users when considering proposed offers. There is clearly a need for LBS research reflecting the active nature of users (e.g. typical response behaviour and location disclosure).

In addition, the research objective of this study is to examine how situational context may predict individual response to LBS. Neither the TAM nor UTAUT models have the capacity to explore the mediating role of location and timing of offers on response patterns to LBS. Furthermore, Weiss (2013) observed that no studies have explored the synchronous use of smartphone apps with LBS. Most studies using TAM and UTAUT are quantitative in nature (relatively passive in focus) leading to minor theory developments. The focus of such studies has mainly been deductive: testing theory and describing usage behaviour.

Karnowski and Jandura (2014) demonstrated how external factors (e.g. situational) influence individual response to LBS. Past studies mainly take a quantitative approach without exploring typical response behaviour and the role of consumer lifestyles in response to LBS scenarios. In addition, previous studies have focused on either LBS adoption or lifestyles: no synchronous studies exist on LBS attributes despite the prominence of mobile internet, apps and location services (Weiss, 2013). Whilst previous studies on mobile marketing have used UTAUT (see

Venkatesh et al., 2003) MPA-model (Wirth et al., 2008) and media behaviour (Zhang et al., 2012), these existing frameworks fail to closely reflect situational contexts (Karnowski and Jandura 2014) mediating contemporary media behaviour. This requires a new way of investigating consumer lifestyles and LBS use through a framework that is reflective of situational context and of social psychological perspectives on mobile phone use.

3.6. Barriers to LBS Growth

We have seen in Section 3.1 and 3.2 the origins of LBS; in Section 3.3 we have outlined the timeline and evolution of LBS, some of the formats and key providers. In section 3.4, previous theoretical frameworks for analysing LBS have been outlined. Linked to both the process and theoretical developments has been the customer perception of the process. A review of literature has identified the main challenges facing LBS providers as well as consumers as hardware and privacy concerns (geo fencing: The Futurist, 2011); limited reach and the fragmentation of industry (Anderson, 2013). Starting with the Futurist (2011), LBS (e.g. location based vouchering) rely on the availability of sufficient hardware and physical infrastructure to 'check in' customers; however, LBS also require the use of geo-fencing to locate users. The challenge therefore is to reach only those users within a retailer's location. In contrast, Anderson (2013) cites the difficulty in reaching geographically dispersed areas with concerns that consumers might be overwhelmed by unwanted LBSs (e.g. location based adverts). Where privacy concerns abound however, opt – in options can be introduced in mitigation. In traditional service literature (Kleijnen, Ruyter and Wetzels, 2007, p.36) it has been demonstrated that people's perceptions of control over situations increase their likelihood of positive feelings towards the experience and enhance perceived value.

Besides privacy and trust issues, Shankar et al., (2010) identified further inhibitors of LBS as;

- Small screen size: Despite the growth in size of some Smartphone screens, the majority are still relatively small hence, they offer less processing capacity.
- Shorter transfer speeds: Mobile devices owing to slow speeds as they are not operating on fixed landlines may render the transfer of 3D images or virtual reality slow.
- Pricing: The prices for Smartphone's and wearables are currently high and network operators charge differently for voice and data services. Based on the later, consumers

appear reluctant to adopt LBS; however, with the introduction of 4G, these charges may fall significantly in the future.

- LBS are a new area with numerous small operators (fragmented) hence the ecosystem is not stable.

The overview has shown that many challenges face services providers and consumers of LBS alike. This study however focuses primarily on the consumer side hence only privacy concerns will be explored further in section 3.6.1.

3.6.1 Issue of Consumer Privacy

Where issues have arisen for LBS in past studies is in privacy (see Dhar and Varshney, 2011). The future development of LBS depends on whether value perceptions for consumers outweigh risks such as fear of intrusion.

The word personalization is often attributed to LBS services. Personalisation is generally defined as, "…the ability to uniquely tailor products, contents, and services to an individual" (Liang, Lai and Ku, 2006). In the context of LBS, this is the degree to which LBS can be configured to match activity contexts, preferences, and needs of the consumer (Xu et al., 2010, p.142). What makes LBS personalisation unique is that it is easy to identify the mobile device (e.g. via Subscriber Identity Module [SIM] card) and the mobile device is usually carried on the person. Benefits of LBS have been widely cited as the provision of contextual and relevant information (Persaud et al., 2012) and tailored offers. Advances in technology since the mid-2000s allow marketers to track their customers using innovative ways, providing new means with which to reach smaller segments with tailored messages based on location (Stewart and Pavlov, 2002; cited in Yousif, 2012).

There are however, concerns that as LBS services become more fine-grained, they now intrude on consumer privacy. Privacy concern relates to access and use of personal information, for example unauthorised initial access as well as third party use; errors and improper use of information (Smith, Milberg and Burke, 1996). Li (2011) refers to concern about personal information disclosure. Yousif (2012, p.151) however highlights consumer concerns over privacy arguing that, *"... the mobile phone is a highly personal device and consumers are very sensitive about the messages they receive."* The nature of LBS is such that users' personal and location information should be collected to guarantee provision of tailored context specific information and services. This includes personal information (Zhou, 2013) - consumers may

feel that they are being tracked and may question the ability of service providers to appropriately gather, store and use this information. Also, related to the issue or privacy concern is the issue of trust, as users may be sceptical about the ability, integrity and the goodwill to protect users' privacy (Zhou, 2013:29). Literature has indicated that where such doubts exist regarding privacy, this directly affects privacy risk (Marlhotra, Kim, Agarwal, 2004; Junglas, Johnson and Spitzmuller, 2008). In a research on LBS usage in China, Zhou (2012) observed that privacy concern had a significant effect on trust and perceived risk: where risks outweigh benefits of personalization, consumers will be less willing to trade personal details and location information. A mobile device is carried on the person all the time and LBA offers may reach users at inconvenient times- where this happens, users may develop negative feelings towards the experience (Kleijnen, 2007). Despite the promising benefit of personalization, extant research points to low levels of adoption of technology oriented products; instant messaging (Lowry, Cao and Everard, 2011): ubiquitous commerce (Sheng et al., 2008); and LBS adoption (e.g. in China, see Zhou, 2012).

Despite the initial enthusiasm (Junglas and Watson, 2008) and the potential of LBS to provide personalised information based on location and improved customer experience, there are increasing concerns regarding privacy and risk (Zhou, 2012). In traditional service literature (Kleijnen, Ruyter and Wetzels, 2007, p.36) it has been demonstrated that people's perceptions of control over situations increase their likelihood of positive feelings towards the experience and enhance perceived value. But LBS does not offer customer control at present. The widespread availability of wireless connectivity (Wi-Fi), research (e.g. Sheath & Solomon, 2014; Awad, & Krishnan, 2006; Dinev, & Hart, 2006) has often highlighted the threat posed by the technology related to LBS. Privacy concerns have centred around the ability of LBS technology to provide real time and location specific information about a target (e.g. consumer). Thus, despite projected growth figures, (PRNewswire, 2013); users of apps are concerned that their privacy may be violated and therefore may be reluctant to adopt or use LBS (Dhar, 2011).

Conversely, when users trust LBS providers, this may reduce their perceived uncertainty and affects flow experience (Zhou, 2013). Culnan and Bies (2003) propose a utilitarian exchange where users' exchange their personal information for something of value. In the context of LBS, the information disclosure may be perceived as consumers' disclosure of personal

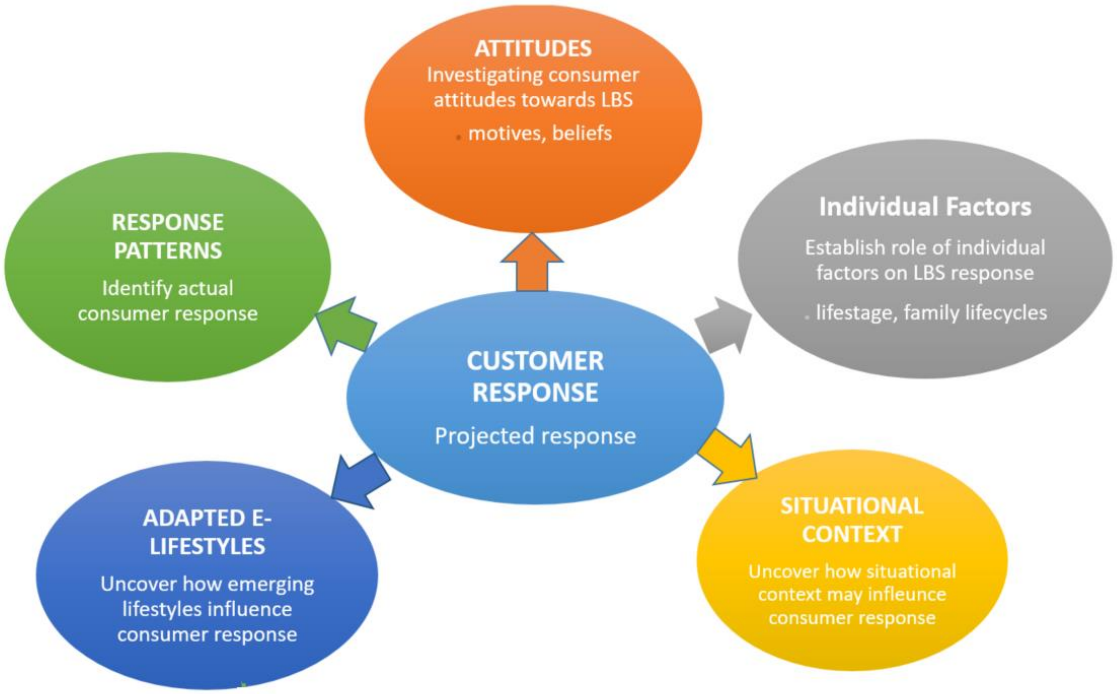
information and location data (Xu, Xin, Luo, Carrol and Rosson, 2011) in return for added value such as contextualized LBS offers delivered based on location. LBS can provide the user with contextualisation value where users are sent relevant promotional offers (e.g. LBA) or information contingent on their activities, interests, location and the exact time of the day. Prior studies have demonstrated that owing to the large amounts of information required to enable personalization, there are significant privacy implications (Kobsa, 2007; Xu et al., 2011) observed the influence of personalization on privacy risk and.

Current research into customer attitudes towards the use and adoption of LBS is in its infancy (Zhou, 2011), and some of the above ideas on both personalisation and privacy will be explored in the research undertaken.

3.7 Preliminary Framework for Exploring Customer Response to LBS

Based on the review of frameworks to reflect both lifestyle, e-lifestyle and mobile lifestyle in Chapter Two and on the frameworks to represent LBS adoption in this chapter, the researcher will focus on a number of key elements when exploring response patterns to LBS. As seen above, adoption factors alone do not account for the LBS engagement and related consumer lifestyle elements- it has been established that several factors may affect individual consumer response patterns to LBS. This study considers some elements of previous frameworks (the UTAUT, adapted e-lifestyle scale, Model of new Media Behaviour) as a starting point for the examination of actual behavioural response to LBS. Four elements feature in the preliminary framework (Figure 3.12).

Figure 3. 12: Preliminary framework for investigating Emergent Lifestyles and LBS Response



Emerging lifestyles

As already established, previous studies (e.g. Yu, 2011; Weiss 2013) have focused separately on either Lifestyle or LBS. Weiss (2013) specifically recommended research that adopts a synchronous approach to these two areas. There is relevance in exploring these emerging lifestyles where the mobile device plays a moderating role in response to LBS. This should shed some light on how lifestyle fits with consumer engagement with LBS.

Whilst emerging lifestyles are hugely informed by traditional scales, the very nature of mobile devices (e.g. ubiquity, single ownership and personalization, as well as localization: Bauer et al, 2005; Zhou, 2011) signals that a new way of thinking on lifestyles is needed in the mobile-wired era. Wired mobile lifestyles are slowly becoming routine. Starbucks customers can also use their mobile phones to 'check-in' (announce their presence) at the coffee shop via social networking sites such as Foursquare (Lammarre,Galarneau and Boeck, 2012, p.1); , pay for their coffee using their mobile phone (e.g. Apple pay) as well as compete with friends and other

patrons for coupons and special recognition (Miller, 2010). In addition, consumers can also receive personalised location-based promotions via their mobile phones as soon as they enter selected stores (Lamamare et al., 2012). Unlike general e-lifestyles, which may be restricted to fixed locations, wired-mobile lifestyles present new contexts as larger numbers of consumers carry their mobile phones everywhere daily. This demands a new perspective on lifestyles that blends personal psychologies, social dynamics, location and media access factors that need to be explored. Some of the dimensions summarised in Table 12 will be considered.

Response Patterns

Past research points to the need for relevance of service offers to the particular circumstances of consumers; according to Gronroos (2011), consumers are increasingly looking for more comfort, fewer problems, lower additional costs (value) and less hassle encountered in the use of goods and services. Consumers can leverage their mobile device to stay connected – but they are more discerning; seeking ways in which they can effectively use their mobile device to enhance private and social lives. There is therefore a challenge for marketers to fully understand how consumers are engaging in mobile shopping behaviours as they respond to LBS. The goal of this research is to gain deeper insight into consumer response patterns to LBS and develop a framework capturing typical response patterns.

Individual Attributes and Attitudes

Zhang et al., (2012) referred to needs and gratifications sought by individual consumers. Other studies (e.g. Persaud et al., (2012) referred to demographic variables instead - age, education and gender. Early lifestyle based studies by Mitchel (1983) emphasized the influence of personal life on individual behavior while Holt (1997) observed the potency of the personality construct: personal factors are essential in the understanding of lifestyle. Similarly, Yu (2011) observed the mediating role of background information (e.g. demographic factors), personal life (e.g. habits, activities and income) on adoption and lifestyles. Weiss (2013) posits that young adults were more likely to use new apps on their smartphones; while Abeele et al., (2014) opines that young consumers used their mobile devices more frequently and placed greater importance on the fashionableness of devices. This is in contrast to older consumers who used mobile phones moderately in a typical week for instrumental and social purposes. Regarding gender, Heinonen and Strandvik (2007) and Baructu (2007) argued that gender differences did

not influence consumers' experience with mobile media; a view contrary to earlier findings by Louis and Wei (2000). This research has potential to shed light on the potential role of individual factors on customer response.

In a cross-sectional study of consumer attitudes towards mobile advertising, Mir (2011) observed some willingness by consumers to receive LBS messages as long as they are personalised. On the other hand, where consumers feel they are constantly being tracked; worries over privacy risk may inhibit usage of LBS (Zhou, 2012). As is common with new technology products, extant research in areas such as short messaging services (SMS: Tanakinjal, Deans and Gray, 2010: Mansour, 2012; Shankar, Hollinger, 2007) and online banking (Zhou, Lu, and Wang, 2010), consumers have often expressed concerns over privacy and intrusion. Some consumers perceive generic messages to be intrusive, preferring to receive relevant content instead (Paavilainen, 2002; cited in Mir, 2011). There is therefore a need to analyse consumer decision - making concerning usage behaviour (Pescher, Phillip and Spann 2013) thus typical response behaviours- it is hoped to look at the evidence in this research on the attitudinal variation towards LBS adoption.

External Environment or Situational Elements

Physical environment refers to users' familiarity with their environment (whether they are at home or in public places) and included factors such as location-related conditions (e.g. media access and social dynamics. Zhang et al., 2012; Karnowski and Jandura, 2014)). Belk (1975) used a five-pronged approach to define the environment of consumer behavior: physical, social, temporal, task and antecedent states thus providing insight into dimensions of situational contexts. Banerjee et al., (2008, p.6) highlight the potency of physical spaces and locations in shaping consumer actions. Similarly, Dholakia and Dholakia (2004) refer to different roles people play contingent on location: an individual consumer will view the physical spaces at home, work or on the go differently. Karnowski and Jandura (2014) emphasized the mediating role of situational factors stating that usage behavior is bound to differ owing to the ubiquitous nature of mobile devices. In the context of LBS therefore, perceptions of usefulness may be different contingent on locations (private or public). Karnowski and Jandura (2014) observed varying mobile lifestyles based on location- ranging from 'en- route' to 'hanging out with

peers' to 'home zone'. It is hoped to identify the way in which situational factors may shape LBS response in this study.

LBS is an emergent area of marketing theory and practice with developments such as apps (e.g. streaming apps) billed to transform customer experience with services. We have also seen how the consumer is increasingly savvy, seeking easy access to services. LBS are used in various contexts and individual LBS responses largely depend on customer perceptions of value and risk. Personalisation has been muted as one way to allay concerns over privacy. In a review of current LBS theoretical frameworks, we have observed the inadequacy of some of the frameworks in examining consumer response to LBS where individual consumer decision-making is likely to be influenced by multiway communication. The next section (section 3.8) will provide a summary of research gaps.

3.8 Summary of Research Gaps

In this chapter we have seen how there are limited predictions of the effect of mobile lifestyles on specific individual search and response behaviour (see Abele et al., 2014). Secondly, inconsistences as well as lack of agreement on the importance of LBS adoption were highlighted. In addition, we saw how the rapid growth of mobile marketing, convergence of ICT and LBS potentially invalidates current technology adoption frameworks. Thus, the passive nature of extant LBS frameworks and studies (Bruns and Jacob, 2014) that perceive visualise individuals' passive LBS users. This presents a challenge: understanding how consumers currently engage with emerging shopping behaviours as well as when, where and how to deliver tailored content (Donovan, 2013). Some of the limitations of previous research are listed in Table 3.3.

For example, there is limited understanding of actual LBS response and the exact role of lifestyles in influencing response patterns. Secondly, we have seen in this contextual chapter a lack of agreement on the exact role of individual factors (e.g. life stage) on consumer response to LBS (see Zhang et al., 2012). In addition, scholars (e.g. Yu et al., 2010; Zhou, 2012) see how implementation of marketing strategies based on LBS is still in its infancy. Furthermore, we saw in chapter one how previous research examined consumer lifestyles and LBS separately (Weiss, 2013). An overview of research gaps is presented next in Table 3.3.

Table 3.3: Overview of Research Gaps

Research Gap	Author
Limited understanding of a) actual LBS consumer response patterns and b) the role of emerging lifestyles in influencing such patterns. Growth in mobile adoption and ICT convergence: need for synchronous research (e.g. use of smartphones and LBS)	Carroll, Barnes, Scornavacca and Fletcher, 2007; Varnali and Toker, 2010; Shankar et al., 2010 Weiss (2013)
Relatively few studies on LBS (14), LBA (3), Mobile Lifestyles (M-Lifestyle) [2] and E-lifestyles (5)	See Table 2.2
Little research has identified suitable measurement scales for these emerging lifestyles	Lee et al., (2009)
Implementation of marketing strategies based on LBS is still in its infancy	Yu et al (2010); Zhou (2012); Weiss (2013)
Relatively few studies focusing on e-lifestyle	Yu, Li and Chantatub (2015)

This overview of research gaps challenges our thinking on how to capture the essence of lifestyle for consumers and typical response patterns. In addition, emerging lifestyles have potential to influence consumer response: rationale for this research. Based on these gaps in research, a set of research objectives were put forward as shown in Table 4.2 (sequential mixed method design). A full outline of the methodology adopted in this PhD study is presented in the next chapter.

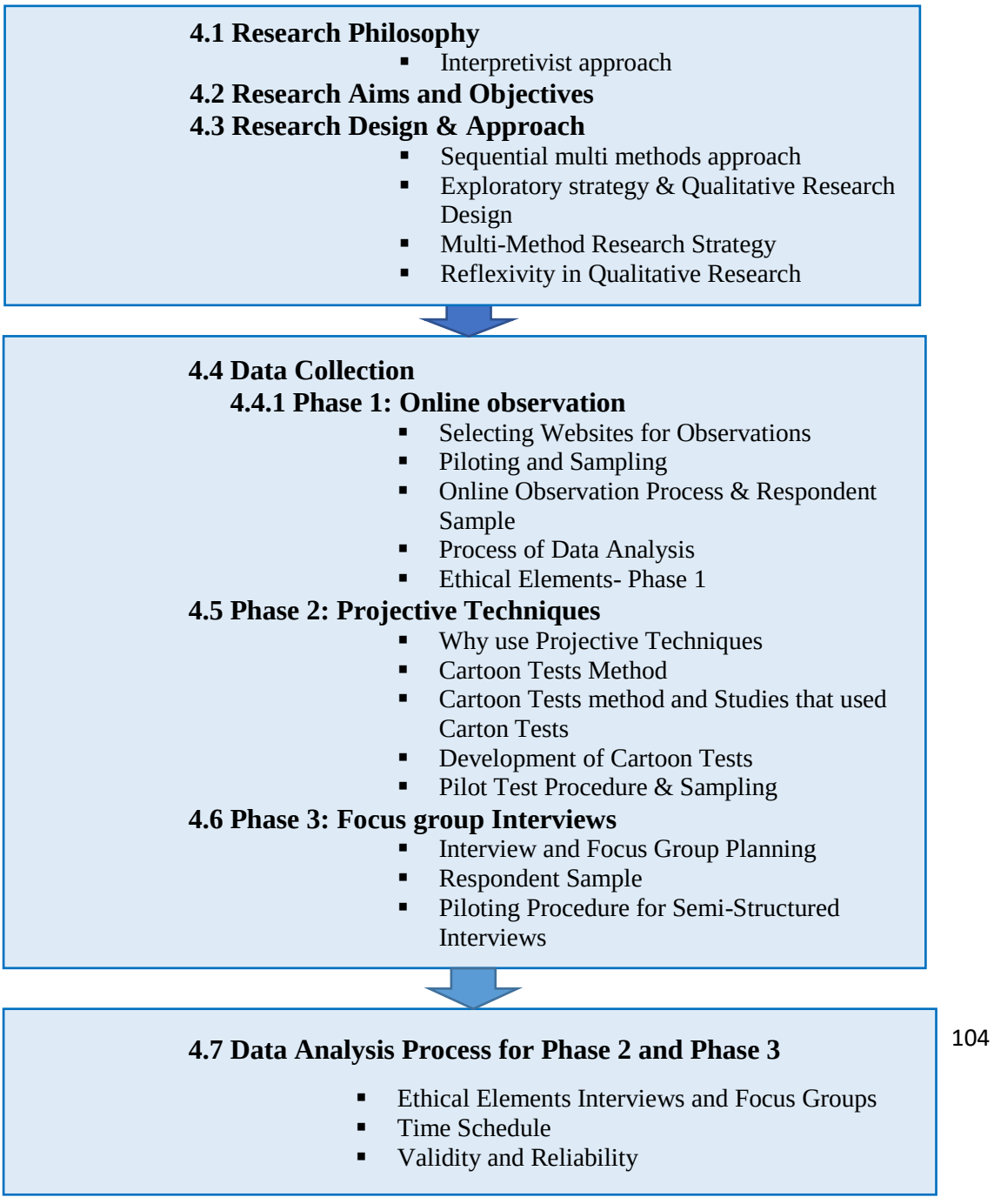
Chapter 4

Methodology

4.0 Introduction

This chapter provides an outline of methodological approaches adopted in this research (Figure 4.1); a good research needs a blueprint to direct collection and analysis of data (Lacobucci, Gilbert and Churchill, 2010). Saunders, Lewis and Thornhill (2016) credit a sound research design for provision and maintenance of research relevance as the researcher seeks answers to research problems

Figure 4.1: Research Methodology Outline



Section 4.1 outlines the chosen research philosophy (tradition) and differences between the pragmatist approach and an interpretivist approach. This is then followed in section 4.2 by a statement of research aims and objectives guiding the study. Following on, reflexivity in qualitative research and the chosen research design (sequential multi methods approach) is justified in section 4.3.2 as well as an explanation of respective phases of the research process. In sections 4.4 an outline of the online observation method is provided as well as justifications for choosing online observations. Section 4.5 outlines use of projective techniques in Phase two. This is then followed by Section 4.6 by outlining use of Focus group interviews in Phase three. The data analysis process is outlined in section 4.7 as well as ethical elements for interviews and validity and reliability considerations.

4.1 Research Philosophy

Research philosophy constitutes a key decision for the researcher regarding the epistemological and ontological focus of a given study. Lacobucci, Gilbert and Churchill (2010), assert that the philosophical position adopted by any research affects results of the study. Similarly, Proctor (2003, p.5) sees value of a philosophical perspective in any research as ability to, "…*clarify the research design in terms of overall configuration, what kind of evidence is gathered and from where, and how this can be interpreted to provide answers to questions asked."* Meanwhile, Saunders, Lewis and Thornhill (2012) cite three philosophical approaches; positivism, interpretivism and pragmatism. Per Bryman and Bell (2015, p.28), positivism is, *"… an epistemological position that advocates the application of the methods of the natural sciences…"* Expressed differently, the positivist approach seeks to explore causal explanations such as trends and regularities in events. In this research however, emphasis is not on establishing trends or patterns per se, but gaining deeper insights into consumer response.

On the other hand, a phenomenological approach describes individuals' lived experiences about a phenomenon. This approach seeks to gather deeper insight on perceptions through inductive qualitative research methods (Creswell, 1998). This view is endorsed by Procter (2003, p.6) who sees this approach as a means with which to observe and measure phenomenon starting with a theory from literature and then researching this to confirm or repudiate a proposition: "*a phenomenological approach that seeks to understand people's interpretation of events rather than events themselves… …."* Saunders et al., (2016, p.140) reiterates how

unlike a positivist approach that seeks law like generalisations about phenomena, an interpretivist approach as a key strand of phenomenology seeks fresh insights and meaning of social contexts. Thus, an interpretivist approach links various types of people and uncovers their experiences. For example, establishing varying LBS experiences between groups (e.g. younger students, young professionals and older established working adults). The interpretivist approach seems to match the focus of this research. Firstly, the research is relatively novel (see Zhou, 2012) - the researcher seeks to explore how meanings are constructed and expressed regarding use of LBS and related electronically mediated lifestyles (e.g. mobile lifestyles). This requires the researcher to delve into individual experiences and identifying different perceptions and behavioural response.

In contrast, a pragmatist approach is a combination of a positivist and interpretivist (phenomenology) positions: blends two methods (qualitative and quantitative methods) to enable the researcher to answer important research questions. Allison, O' Sullivan, Owen, Rice, Rothwell and Saunders (1996) highlighted the complementarity of both positivism and interpretivism citing similarities between the different schools of thought. Johnson and Onwuegbuzie (2004, p.5, 6) provides a clear explanation of this philosophy;

> *"Pragmatism as a philosophy that can help to build bridges between conflicting philosophies…a middle ground between philosophical dogmatisms and skepticism and to find a workable solution (sometimes including outright rejection) to many longstanding philosophical dualisms about which agreement has not been historically forthcoming."*

Saunders, et al., (2016) recommend the use of a pragmatist approach where more than one approach is required to answer a research question. Nonetheless, only one approach, interpretivism is applied in this research; qualitative method of enquiry hence a pragmatism approach is not a suitable philosophical rationale for this study. In addition, pragmatism is about working within both positivist and interpretivist positions to fully address a research problem (Saunders et al., 2016). In this study, only one approach is used (interpretivism) to fully study day-to day life of individuals in their natural settings. The overall aim of this study is to delve into individual perceptions and discover individual response to LBS hence choice of an interpretivist approach.

In conclusion, in this study, the researcher is adopting an interpretive approach that lends itself to in-depth understanding of consumer motives and behavioural response to LBS. An interpretivist approach is chosen as it enables the researcher to understand emerging lifestyles resulting from individual use of mobile devices to access LBS (e.g. gleaning views and comments from online forums). Furthermore, this approach is congruent with Silverman (2013) and Creswell (2013) who asserts that meaning is constantly revised by social actors in society (researcher and respondent) hence ability to capture emerging experiences (e.g. lifestyles). Therefore, an interpretivist approach has potency in providing valuable insight into individuals' 'lived' experiences. In contrast, pragmatist approaches have been criticised for to failing to provide satisfactory answers to some research questions (e.g. dealing with useful but not true beliefs or propositions [Johnson et al., 2004]) chosen to answer the research questions. After all, the chosen area of study is relatively new requiring in-depth exploration and description of consumers' 'real-life' behavioural response to location based stimuli.

4.2 Research Aims, Questions and Objectives

The principal objective of this study is to explore consumer attitudes towards LBS and identifying the role of lifestyles (consumer lifestyle and mobile lifestyle) in shaping behavioural response. Based on these research aims, answers are sought to the following questions:

a) What are current consumer attitudes and familiarity towards Location Based Services in the UK?
b) What is the range of LBS experience across different customer groups?
c) What role, if any, do lifestyles and situational context have on individual consumer response to LBS?
d) How do consumers respond in typical LBS encounters?
e) What individual characteristics might link to individual behavioural response towards LBS (e.g. perceptions of value and risk, life stage and family life cycles etc.)?

The study seeks to:

1. Investigate consumer familiarity and attitudes towards UK location based services.
2. Explore current UK consumer experiences with location-based services.
3. Uncover how e-lifestyles and situational context may influence individual consumer response to LBS.
4. Investigate actual consumer response patterns (response process) in LBS encounters.
5. Examine how respondent perceptions of value and individual factors (e.g. life stage and family life cycles) influence consumer response to LBS.

4.3 Exploratory Approach and Qualitative Research Design

Per Lacobucci et al., (2010), research design is a framework or blueprint used to guide collection and analysis of data. Simply put, *"a research design is the detailed blueprint used to guide a research study towards its objectives." (Aaker et al., 2013, p.63).* Bryman and Bell (2015) and Bryman (2016) identify two specific orientations - quantitative and qualitative. A quantitative orientation focuses on the quantification of phenomena for example estimating the number of people who are likely to behave in a particular way (Lacobucci et al., 2010). In a quantitative strategy, the researcher seeks to obtain specific and measurable details about consumers' (e.g. usage patterns and lifestyle trends). Parasuraman et al., (2007) recommends use of a quantitative (descriptive) approach where one needs to describe something or generate insight about characteristics of a study group. Kolb (2012) refers to this approach as a 'tool' for obtaining statistical data whilst Lacobucci et al. (2010) cite some of the benefits of this approach as a) an ability to describe segment characteristics; b) it enables estimation of the proportion of people who are inclined to behave in a certain way. And c) it facilitates future predictions/forecasts. Lacobucci et al., (2010, p.59) succinctly describe this as, *"... typically concerned with determining the frequency which with something occurs or the relationship between two variables… trends consumption."* This is not the main focus of this PhD research. Instead of looking at relationships between pre-determined variables, the study is seeking answers that will emerge on consumer experience, familiarity and behavioural response to location based material. Based on this focus, a qualitative research design is adopted which

matches an interpretivist philosophy. Denzin and Lincoln (2005: In Saunders et al., 2012) associate qualitative research with an interpretative philosophy where emphasis is on establishing meanings; in this study, capturing real consumer experience and rationale behind LBS responses (e.g. situational/contextual, simple/complex use) will focus strongly on understanding consumer meaning.

Surprisingly, the majority of extant research on mobile marketing (see Table 4.1) leans towards quantitative approaches. Yet, as an area of research, there are several aspects of mobile marketing that we know little about.

Table 4 1: Overview of Previous Research Design

Author and Year	Research Focus	Research Design	Key Findings
Lee, Soutar and Louviere (2007)	Comparison of different lifestyle measurement scales.	Online research panel (questionnaire)	Best-Worst Scaling approach produced better results and less skewed than other measurement scales.
Sulaiman, Ng and Mohezar (2008)	E-ticketing usage trends and patterns.	Self-administered questionnaire.	Popularity of e-ticketing; convenience and ease of use motivate online ticket purchase.
Lee, Jim and Jolly (2009)	Lifestyle characteristics influencing technology adoption.	Self-administered questionnaire (preliminary and main).	Four internet based lifestyles factors emerged (fashion consciousness, leisure orientation, internet involvement, e - shopping).
Mir (2011)	Explores customer attitudes towards M-advertising	Self-administered questionnaire (two phases).	Positive response to creative content and customised messages.
Yu (2011)	Constructing an e-lifestyle scale.	Online survey.	High likelihood of adoption of products/services meeting individual lifestyles.
Pardamean and Susanto (2012)	Student acceptance of blog technology	Self-administered questionnaire and online observations.	Social influence and performance expectancy significantly influences behavioural intention.
Valentine and Powers (2013)	Segment characterisation of Generation Y using VALS.	Online surveys.	Electronic media is the primary media used by this group.
Abelle, Antheunis and Schouten (2013)	Examine different mobile lifestyles.	Self-administered questionnaires.	Marked differences in adolescent mobile phone use.
Pandey and Chawla (2014);	Examination of existing lifestyle scales, scale construction and validation.	Phase 1: interviews and focus groups, Phase 2: off line and online questionnaires.	Similarity of scale items in different countries but scale application is context specific.
Hassan, Ramayah, Mohammed and Maghsaudi (2015)	Impact of e-lifestyle on customer satisfaction and loyalty.	Self-administered questionnaire.	Significant effect of e-lifestyle on customer satisfaction and loyalty. Lifestyles predict consumer behaviour.
Yu, Li and Chantatub (2015)	Effects of consumer e-lifestyles on mobile banking adoption.	Phase 1: focus groups interviews & panel discussion, Phase 2: Survey.	E-lifestyle greatly moderates use of mobile banking.

Table 4 2: Overview of Sequential Multi Method Design

Phase	Aims	Data Collection	Data Analysis	Expected result
1. Online observation (Non-participant)	1.) To investigate consumer familiarity and attitudes towards location based services in the UK. 2) To explore current UK consumer experiences with location based services.	**Online Observations** Non-participant	**Qualitative Content Analysis**	**Exploratory** Examine and define variations in customer response to LBS. Generate themes to inform second phase of data collection.
2. In-depth Interviews (specialist)	3) To uncover how e-lifestyles and situational context may influence individual consumer response to LBS. 4) To investigate actual consumer response patterns (response process) in LBS encounters.	**Projective Techniques** Specialist Interviews (cartoon tests & depth Interviews)	**Qualitative Content Analysis**	**Exploratory** Identify elements that influence response. Investigate how lifestyle shapes individual LBS response. Establish response patterns and processes in LBS choice. Identify how situational context influences LBS response patterns.
3. (Main): Focus group interviews	5) To examine how respondent perceptions (value and risk) and individual factors (e.g. life stage and family life cycles) influence consumer response to LBS.	**Semi-structured Interviews** Three focus groups	**Qualitative Content Analysis**	**Exploratory (rich description)** *Gain in-depth understanding of:* (a) Facilitating conditions (e.g. personal factors & risk) influencing individual response. (b) Debate and discuss earlier findings.

Abeele, Antheunis and Schouten (2014; Weiss, 2013) point out limited predictions of the impact of mobile lifestyles on specific individual search and response behaviour. Similarly, Brengman et al., (2005) and Yu et al., (2015) highlighted the inadequacy of traditional lifestyle scales in measuring emerging mobile lifestyles. When looking at the emerging area of location based services, consumer lifestyles and mobile lifestyles, this is an emerging innovative area where much is unknown or explored. This calls for a qualitative methodological approach offering rich explanatory value (Dixon-Woods and Fitzpatrick, 2001). This choice is also informed by researchers (see Rook, 2001; Teddlie and Tashakkori, 2003; In Koenigstorfer, Groeppel-Klein and Pla, 2008) who argued that quantitative methods which are positivist in nature are not best suited for exploring individual motivations and responses to emerging mobile oriented services. A qualitative approach seeking to explore behavioural responses and emerging lifestyles is therefore adopted. In addition, given the relative newness of the research area, the researcher adopted a reflexive approach in the process of generating knowledge into LBS and consumer response. Thus, section 4.3.1 discusses how a reflexive approach to qualitative research was adopted in the research.

4.3.1 Reflexivity in Qualitative Research

Many scholars see reflexivity as a necessary strategy in the process of generating knowledge (Ahmed Dunya et al., 2011 cited in Berger, 2015). Finlay (2002, p209-213) acknowledges the multidimensionality of reflexivity based on research aims, theoretical and methodological approaches adopted. Thus, Finlay (2002) defines reflexivity as a confessional account of methodology. Reflexivity in qualitative research depends on whether or not the researcher is part of the researcher process (Berger, 2015, p.219). In addition, reflexivity as a process can be used to ensure that the researcher does not influence the process (Silverman (2017) as well as ensuring reliability of a chosen method. In this PhD study, reflexivity is evident by the choice of a multimethod approach to data collection (e.g. sequential design to fully explore research objectives see Table 4.2). This study observed reflexivity throughout the research process as recommended by Bradbury-Jones (2007). Thus, from research objective formulation, data collection and analysis as well as reporting of findings and conclusions. For example, stepping aside as a researcher from *'own experience'* with LBS and using insight from literature to formulate research objectives. Secondly, choosing various data collection methods best placed to 1) explore overall consumer familiarity, experiences and attitudes towards LBS via online observations, 2) use of projective techniques to investigate typical response patterns and 3) use of focus groups to question the rationale of individual responses: reflecting on findings from

earlier research phases. In addition, collaborative reflexivity was observed as recommended by Finlay (2002). Thus, 'multiple voices' of knowledgeable academics were solicited when interpreting findings from specialist interviews (see section 4.5.4). The research design and approach is explored next in section 4.3. 2.

4.3.2 Multi- Method Research Strategy

Saunders et al., (2016) identify a key methodological choice facing the researcher; whether to adopt mono or multiple methods. The former uses only one method which could be either quantitative or qualitative in nature whilst the latter comprises multi methods or mixed methods. A mixed method approach is one in which, *"both quantitative and qualitative research are combined in a research design"* (Saunders et al., 2016). Kelemen and Rumens (2008; cited in Saunders et al, 2016) credit the mixed method approach for allowing the collection of reliable and relevant data that potentially adds value to the research. However, in this research, a quantitative approach is regarded as less appropriate. The convergence of LBS technology and emerging e-lifestyles (Mir, 2011) have meant that positivist measurement scales used in questionnaires for example may not adequately capture consumers' 'unique' hidden motives, beliefs and behavioural response patterns (Koenigstorfer et al., 2008, p.218). Therefore, a multimethod qualitative study is followed. Creswell (2014) and Aaker, Kumar, Leone and Day (2013) recommend use of a multimethod approach as it leverages features of one method against the other. In addition, Aaker, Kumar, Day and Leon (2011) cite the advantage of offering more refined results and some triangulation of data (Denscombe 2007; Lacobucci et al., 2010). A sequential multi-method approach comprising non-participant online observations (Phase 1) and specialist interviews using projective techniques (cartoon tests- Phase 2) are used in the initial phases. The two initial phases were then complemented by a further phase (Phase 3) comprising focus group interviews. The focus group interviews go beyond the initial individual responses (e.g. in online observation and specialist in-depth interviews) and seek to takes respondent through individual experiences with LBS in more depth; gleaning useful insights on lifestyles and seeking more explanation understanding of the relationship between individual attributes such as lifestyle and LBS response. Table 4.2 and Figure 9.1 (Appendix 11) highlight the sequential multi-method design of the study. Further justification of the research design and how it reflects a continuous exploratory study as can be seen in Appendix 11.

4.4 Data Collection

A multi-method approach to data collection was adopted in this study. In the next sections, the justification and planning for each method is outlined; in Section 4.4, the online observations in Section 4.4.4.1, specialist interviews and in Section 4.5 the focus groups. The chapter concludes with an outline of data analysis.

4.4.1 Phase 1: Online Observation

The next section (4.4.1.1) explains how an online observation approach using netnographic elements was used in this PhD study.

4.4.1.1 Choice of Online Observation Approach using elements of netnography

Observation falls under ethnographic methods and entails the study of behaviour in natural settings (Elliot and Elliot, 2003) whereby researchers seek deeper understanding of the topic studied. Saunders et al., (2016) define observation as the planned recording, description and supposition of people's behaviour to provide an in-depth understanding while Creswell (2014) refers to observation where the researcher records field notes on behaviour and activities of individuals at a research site. Whilst these two definitions provide a somewhat general definition of the observation method, Mann and Stewart (2009, p.86) specifically refer to, "… *the online observation of naturally occurring talk…various kinds of newsgroups, synchronous conferencing (using real-time chats) … to reveal the way in which meaning is accomplished".*

Online observation has become central to many research studies of consumer behaviour (e.g. Kozinets, 2010; Mkono and Maxwell 2014). Similarly, Lacobucci et al., (2010, p.76) credit the online observation method as a holistic approach to research, providing the researcher (ethnographer) with an environment and context. Thus, the online environment provides an ideal situational context and environment in which to observe an online community. Kozinets (2010, p.12) posits that, "*Online communities form or manifest cultures, the learned beliefs, values and customs that serve to order, guide and direct the behaviour of a particular society or group".* Bowler (2010, p.1270) discuses online observation specifically referring to online ethnography as the study of communities and cultures resulting from computer – mediated social interaction.

Creswell (2014) and Bryman and Bell (2015) identify the varying roles of non-participant or complete participant in observations. In online observation, as participant, there are varying degrees of participation; where the observer could, on the one hand, may pose general open – ended questions allowing participants liberty to express views or could engage further and seek to talk to specific members or the researcher could ask specific questions derived from research objectives (Chisnall, 2011). The non-participant approach allows the researcher to listen in and record naturally occurring conversations (Creswell, 2013). Where the observer does not participate, they *'lurk'* unseen; watching interaction(s) without interposing themselves. This is explained by Rodino (19

: In Mann et al., 2009, p.87) who states that;

> *"Most of these observations were recorded. I made observations by entering chart channels and lurked (entered no text). I watched interactions on chat channels: #chat, #chart zone…."*

Given consumers' increasing use of the internet (embedded in people's lives), Bryman (2016, p.448) foresees online observation becoming a natural choice for the researcher. Thus, online observations are more suited in recording consumers' '*observed'* behaviour, and comments offered by members of a virtual community. Kozinets (2015) argues that the participant approach can be intrusive, citing how naturally occurring behaviour enables the researcher to obtain true meanings, motives and beliefs about novel services (e.g. LBS). Key benefits of a less overt approach to observation are highlighted by Mkono et al., (2014, p.290), who see explanatory value of 'taping' into the *"dynamic repository of individuals' unprompted experiences and reflections that enable the researcher an understanding of which individual components of their experience these individuals consider important."*

Given that one of the principal aims of this research is exploring customer awareness and experiences, using a non-participant observation approach provided access to spontaneous responses and articulation of experiences.

Table 4.3: Outline of Netnographic Elements

Creswell (2014) elements	**Kozinets (2015) elements**	**How these elements were addressed in the study**
Selecting the site to be observed; gaining permission to observe. Identifying who/what is to be observed	Entrée: Questions formulated Appropriate online community identified, mindful of focus, engages in relevant topics, sufficient volume of postings, good number of distinct messages posters, contains rich data carries interactions between group members Researcher learns bout forum	Twelve sites screened and six sites selected
Choosing the role that the observer will assume	Data Collection and Analysis: Considered member categories *Tourist'; 'Mingler'; 'Devotees' and 'Insiders' (*(Kozinets, 2010) and Arruda-Filho et al., (2010) ideas on mobile phone users' social behaviour; *'Innovative Users' 'Techno-Social Users'; Utilitarian Users'* and Apple three distinct groups:	Role of complete observer chosen Distinct groups identified: *'Involved'*group very knowledgeable about LBS, *'Observer'* had limited expertise of LBS, posted minimal content, *'Transactor'* seeking advice but irregular posts to the forum.
Designing an observation protocol for recording the notes or conversations in the field	Kozinets (2010; 2015) - use of reflective field notes throughout the data collection process AND copies of member communications. Software analysis to be used (NVivo 11) (Kozinets 2002 and Bryman and Bell (2015).	Observation Protocol developed See **Appendix 12** Data analysis started manually and then (NVivo 11) was used
Slow withdrawal from the site Thank participants	Kozinets (2010) ideas on withdrawing from an observation	Tapered observation time
Prepare full notes giving a comprehensive narrative (events and people).	Interpretation; Focus on emerging behaviour (decontextualizing conversational acts). Be careful of bias and state limitations Avoid generalizations to other groups	Reflected on notes taken during observation sessions
Observe Online Research Ethics	Ethical recommendations of Kozinets (2015) British Psychological Society (BPS, 2014).	

It was anticipated that a non-participant observation method would enable the researcher to collate disparate opinions and responses towards LBS as well as emerging e-lifestyles and to 'ascribe meaning to observed events'. It was hoped that the online observation would help the researcher to glean relatively anonymous views of LBS users (Parasuraman, Grewal and Krishnan, 2007); to understand how individuals routinely use LBS in daily activities and to get closer to real-life experiences of respondents.

Some elements of a netnographic approach were observed in the online observation process (see Table 4.3). With regards to planning and preparation for the netnographic process, Creswell (2013, p.167) recommends an eight-pronged series of steps to be followed; just six of those steps were used here- they are outlined in detail in Appendix 10 but they are set out in Table 4.3, along with the guidelines from Kozinets (2002) and Bryman and Bell (2012). In the following sections (4.4.2 to 4.4.6), further detail on the process followed is offered.

4.4.2 Selecting websites for Observations

The researcher observed online forums over a twelve-week period (3 months) to listen in to member (users) views, experiences about LBS (e.g. location based advertising, tracking, health and fitness trackers etc.). After an extensive search, six sites focusing on LBS, LBA, Technology and Lifestyles were chosen. Twelve websites being shortlisted and the screening process was conducted by using/typing keywords (LBS, LBA, E-lifestyles and technology) until relevant websites were identified. The selection process was relatively long given that discussion traffic was not evenly distributed in a typical day and this matches earlier researcher experiences - Maclaran et al., (2002, p.323) notes that researchers spend considerable amounts of time monitoring sites to observe heavy and light periods of usage. Eventually, the sites were whittled down to six:

1. The BBC: UK based
2. The Telegraph: UK based
3. The Register: UK based
4. RTB Forums: UK based
5. Quora: Global
6. MIT Technology Review: Global Review (predominantly USA)

Out of these six websites, five were UK based whilst the remaining one was global (the MIT technology review being predominantly USA based with a global appeal). Literature (e.g. Jardine, 2010) has demonstrated that location services (e.g. Foursquare) are widely used in the USA as opposed to the UK therefore the inclusion of a global sites helped to broaden insights.

4.4.3 Piloting and Sampling of Forums Threads for Online Observation

Elliot et al., (2003, p.215) in their study of ethnographic and quasi-ethnographic research methods, acknowledged the need to use a method that *"provides a thick description of lived experiences of consumers."* Procter (2003, p.237) outlines three conditions that should be observed to ensure the observation method is effectively carried out:

- The event should be observable
- The event must occur frequently or be predictable
- The event must be completed over a short period.

This study seeks to explore behavioural responses of online consumers who have some awareness and experience with LBS. The chosen websites have ongoing discussions rich in content thus allowing the researcher to select specific threads that can be followed over the twelve-week period. The sample was drawn from a total of six websites (as previously stated) with rich discussions on LBS. All websites required full adult registration by contributing members, however given that these forums were in the public domain (see earlier comments), and the researcher chose the non-participant stance and did not need to register to gain access.

A preliminary scanning of six websites: (www.theregister.co.uk; www.rtbforums.com; www.quora.com;www.technologyreview.com;www.bbc.co.uk/news/business;www.telegraph.co.uk/technology/news); was conducted for two weeks as recommended by Kozinets (2010). This enabled the researcher to choose sites providing rich insights and dialogue on the chosen subject. Out of the six websites, only three highly interactive sites with frequent dialogues were finally selected for full scale observation based on recommendations of Procter (2003). The preliminary sites that were dropped had relatively few dialogues (www.technologyreview.com www.telegraph.com and www.rtbforums.com). For example, the Telegraph site had very newsworthy articles on LBS but there were limited followers or comments hence the site was dropped. Thus, despite covering LBS, some of the preliminary sites had limited dialogue. Therefore, following the pilot exercise, only three websites www.theregister.co.uk;

www.quora.com and www.bbc.co.uk/news/business) were carried forward as shown in Figure 4.2.

Figure 4.2: Source of primary data for Online Observations

Names of Websites (URLs)	www.theregister.co.uk; www.quora.com www.bbc.co.uk/news/business
Period websites monitored	November 2015- February 2016
Total threads checked	58 threads about LBS and lifestyles
Keywords searched	LBS, LBA, E-lifestyles, technology and apps,

These sites provided frequent and rich dialogue on the research subject (See Appendix 5 for sample threads). The first and second sites provided extensive insight whilst the third (www.bbc.co.uk/news/business) had limited but rich insight gained on LBS user characteristics and lifestyles. Overall the researcher found out that the chosen websites for Phase1data collection were central hubs for LBS discussions. Similarly, the chosen threads were selected based on them providing relevant content and rich narratives of knowledge, experience and response to location services via smart devices. In addition, a unique posting of select members (see Table 4.5) was another key criterion for website choice.

4.4.4 Online Observation process

As previously stated, the chosen websites/forums were observed over a twelve-week period (from mid-November 2015 to end of February 2016); member comments were recorded in every session. Mann et al. (2009, p.86) observed differences in scale in observational research citing Paccagnella (1997) who recorded and archived messages monthly over a six-month period (a total of 10 000 from 400 users). Secondly, Rodino (1997, cited in Mann et al., 2009) analysed observations over a ten-week period. This study therefore adopted the much shorter time scale (three months) based on the limited time available given the multi - methods approach adopted. The researcher observed each of the three sites once every week until a saturation point had been reached for each respective website (Glasser and Strauss, 1976, in Creswell, 2014; Kozinets, 2002). Sample threads and reflective notes were saved on a new word document each week until the end of the data collection period. In selecting the threads,

the researcher chose only threads with relevant content as well as unique postings of key forum members as defined by Arruda-Filho et al. (2011). A structured observation form (Illustrated in the Participant Profile, Appendix 12) as recommended by Creswell (2013) and Kozinets (2015) was used to record the comments stating observation times, duration, key themes as well as providing a sample of some the of threads. A reflective diary was also created to summarise weekly observations of select websites. Emerging themes (see Table 9.9) were recorded and then compared with those identified from the review of literature.

4.4.4.1 Respondent Selection and Sample

Members of the site comprised adults aged 18 years and above (only adult members registered on the site). A non-probability sampling approach was used to guarantee representativeness given chances of selection for any individual are uncertain (Brown, Suter and Churchill, 2008). Bryman et al., (2015) recommends non-probability sampling where structured observations are used. Both convenience and judgemental sampling methods are chosen for the selection of online threads as recommended by Creswell (2014). To start with, choice of websites was based on them being readily available to the researcher [convenience] (Brown et al., 2008). For example, forums targeted at UK audiences (e.g. The BBC). In terms of actual forum and thread selection, a judgemental sampling approach was adopted, selecting only those posts featuring predefined key words as well as containing sufficient dialogue and engagement. Previous research by Kozinets (2002) on postings by members of an online coffee community used a purposive sampling approach; here carefully chosen message threads were selected where keywords such as location based services, apps, location based advertising were used by online members (see Table 4.4).

Table 4.4: Key Selection Criteria

Key Search Terms Used	Online Member Age Registration Requirements	Number of Individual Online Posts made	Individual Responses to other Online Posts
GPS	18 years of age and above Registered on website	Minimum one post to the online community	Minimum one response to other online posts
Location Based Services			
Location Based Advertising			
Location Tracking			
Location Based Reminders			
Location			
Location Advertising			

As seen in Table 4.4, other key selection criteria involved was observing the number of times each member posted or responded to posts by fellow members of the online group. Thus, how many times an individual member posts comments in response to other member posts. For example, we see in Table 4.5 how member 'A' responded three times while member 'SIG' responded four times to a thread on, *"How can we manage this internet thing?"* (See column four, row four- Table 4.5). Clearly some members were more active than others.

This insight on online member activity enabled the researcher to identify different user groups (e.g. *'Involved Approach', 'Observer Approach'* and *'Transactional Approach'*) and corresponding experiences with LBS as shown in Table 5.9. A sample of the discussion threads chosen for this study is shown in Table 4.5. For example, **A, AC** and **SIG** were some of the key contributors on the site on LBS and mobile lifestyles (e-lifestyles) in a sample of 28 threads from the first five threads (see Table 4.5). Similarly, throughout the entire observation, these members remained active contributors to the forum discussions. In addition, various subjects ranging from LBS use, mobile device ownership, social networks and internet browsers were discussed where these key contributors participated. Therefore, these members were clearly knowledgeable about mobile and internet oriented services and communication and their adoption of LBS.

Table 4. 5: Sample Threads about LBS and E-lifestyles

Online Thread Number	Number of Posts	Example of Keywords used	Exemplary Threads	Key posters	Number of posts
1	1	Location Based Advertising	*Location Based Advertising grows up*	**A** (3 posts).	7
2	1	Privacy	*Apple details privacy policies for US Congressman*	**A** (2 posts).	4
3	11	Location Tracking Location Based Reminders	*Is iPhone data collection legal? Phorm Apple pie; Apple tweaks privacy to juice location tracking; location based reminders; where did Siri find info?*	**AC** (6 posts); **DJ** (2 posts); **SIG** (3 posts).	15
4	9	GPS Location Location Based Services	*How can we manage this internet thing? The Euro gov need YOU; Hacker pilfers browser GPS location via router attack; Apple bans geo loco ads on IPhone, iPad*; Social networks breeding spatial junk; location Based Services; the truth about LEAKY; Apple owners are the most loyal smartphone buyers; Apple must be tried for the bug in very fanboi's pocket*	**SIG** (4 posts); **A** (3 posts)	10
5	6	Wi-Fi Location Advertising	*Windows Phone 8: Everything you need to know at a glance; Google claims Wi-Fi slurp; Google now owns location advertising; ALERT! There'll be EMERGENCIES on TWITTER for UK, Ireland;38 states grill Google on three-year Wi-Fi slurp; iPhone compass evidence surfaces; US demands right to snoop world; Mif personalises Bing search results.*	**SIG** (3 posts); **A** (2 posts).	12
Total	28			5	48

4.4.4.1 Familiarizing with Online Community

Having identified relevant online communities to be observed, the researcher followed some of the guidelines by Kozinets (1998) and Creswell (2015). When adopting elements of a netnographic approach this research involved a three month 'lurking' period on the three sites. A lurking approach was preferred to participant approach as it offers unobtrusive observation (Garcia, Standlee and Bechkoff, 2009). Similarly, Quinton and Harridge-March (2010) highlight how rich insights on both contributors (e.g. perceptions) and content can be obtained by scanning online communities. Creswell (2013) acknowledges the potential for deception of respondents while Kozinets (2002) sees problems with establishing informant identity. More elaborate guidelines on member checks are provided by Kozinets (2014) who adopts the principles of Tom Boellstorff and colleagues (2012, cited in Kozinets, 2015, p.128) in advising researchers to be wary of deceptive practises by respondents.

The researcher chose sites where members were required to provide names/identification labels making it relatively easier to identify respondents contributing on the site. Key contributors to the chosen sites were identified based on the number of followers, posts and responses to member questions. By observing the images on user profiles as well as user name (s) the researcher sought to identify any double posters. Thus, as far as is known, there were no visible double posters on the LBS forums. Boellstorff, Bonnie, Pearce and Taylor (2012, p.82-85) provide seven practical guidelines on keeping netnographic filed notes. And this study only followed four of these qualities:

I. Writing down things of interest that emerged during the interactions and experience which are then typed up in detail after each participant session. This is illustrated in Appendix 12
II. Taking screenshots of activity (these complement field notes per Kulavuz-Onal and Vasquez, 2013), and writing small commentaries as soon as each observation session finishes. In addition, word cloud maps were used as part of the NVivo analysis to illustrate key observation themes. See samples of actual postings in Appendix 12.
III. Writing observational notes, and interpretation of reflective field noting separate and distinct: keeping initial interpretation of an event, interaction and experience separate.

Given the inductive and emergent nature of online observation with netnographic elements (Kozinets, 2010); reflective notes were valuable, allowing the researcher to note down information pertaining to user experiences. This also is illustrated in Appendix 12. The researcher made use of full field notes at the end of each observation; allowing information about experiences (e.g. with LBS, emerging e-lifestyles and m-lifestyles), conversations to be recorded. These notes provided a summary of the observations and assisted in establishing emerging themes. Kozinets (2015, p.189) states that field notes, *"provide key insights into how online social interactions function and transpire… very useful resource to turn to in data analysis when asking why a particular person made a particular graphic, photograph, message or posting at a particular time."* Secondly, field notes capture social experiences where the researchers' recollection of subtle learning, socialization and acculturation may be diluted over time (Kozinets, 2015, p.190).

IV. Collecting 'scrapbooks' of online artefacts (collecting threads, pictures and symbols). This is also illustrated in Appendix 12 where pictures and online threads were presented. In addition, Wordle data sets were created to show key words as shown in Figure 32, Appendix 12.

Kozinets (2002) recommends that researchers follow a similar approach to grounded theory (Goulding, 2002; Kolb, 2012) where the researcher collects and analyses data simultaneously: data collection continues if new insights emerge. Therefore, the researcher may still be participating in the online community during the final stages of the research to enable members of the online community to check out the researchers' interpretation as well as to permit collaborative interpretation. However, the chosen websites in this research are in the public domain and as already established; there was no researcher introduction to the group. The data collection process continued until no new insights emerged from forums/group discussions. The researcher therefore stopped observations after a twelve-week period when a saturation point had been reached. It was felt that limited further insight on initial awareness and experiences with location services of members was available.

4.4.5 Process of Data Analysis for Online Observation data

Kozinets (2010) recommends the following process for data analysis: classification, coding analysis and contextualization of communicative acts, pointing out the need to observe research ethics at each stage. In addition, Kozinets (2002, p.5) identifies two important elements of the data collection process: (1) data collected by the researcher by directly copying the online

computer mediated communications of community members, and (2) the reflective notes (data) that the researcher writes about the online community (observations, interactions and meanings). As illustrated in section 4.4.9, Appendix 3 and Appendix 12 of few examples of each kind of data. As, recommended by Kozinets (2002, p.67) in the first stage, the data was coded and classified. In this study, postings were coded as recommended by (Spiggle, 1994, p.492). The researcher started by copying online comments from the chosen websites before proceeding with coding. This simplified two stage approach is widely used in netnographic research (Bowler, 2010; Mkono, 2012; Mkono, 2014; Arruda-Filho et al., 2011; Wu et al., 2014). For example, Mkono (2012), downloaded and manually analysed online reviews from select websites, conducted thematic analysis on the reviews/comments to establish recurrent themes (classifications) as recommended by Baumgartner and Schneider (2010); Braun and Clarke, (2006); Floersch et al., (2010); Gupta and Levenburg (2010).

The approach by Mkono (2012) was adopted to this study, the researcher read the reviews several times to establish key themes in the data followed by manual coding (e.g. early stages pages 1-102, highlighting and making short reflective notes on recurring ideas). As mentioned earlier, the remainder of the data was analysed using computer software (NVivo 11). Key quotes were highlighted and coded in preparation for data analysis and findings stages (contextualization of communicative acts). In addition, weekly diaries of reflective notes were exported to NVivo 11 for storage and to facilitate generation of word cloud and final analysis. This study therefore adopted a two-pronged approach to data analysis; starting with a manual analysis where sample threads were manually analysed and coded. This approach is congruent with Kozinets (2015) who recommends use of manual coding when analysing fewer than 100 postings. For the initial data collection stages, blogs were manually coded and themes developed to reveal and map out consumer experiences, awareness levels and behavioural responses towards LBS. The stage also involved exporting reflective diaries to data analysis software (NVivo 11) to facilitate full analysis based on relationships, patterns and processes).

In coding the data, the researcher tried to understand the cultural groups in which the data can be allocated to provide a classification. A culture code is, *"…the unconscious meaning we apply to any given thing – a car, a type of food, a relationship, even a country- via the culture in which we are raised"* (Clotaire Rapaille, In the Culturer Code, 2006: cited in Kozinets, 2015, p. 203). For example, in terms of LBS and E-Lifestyles, the researcher sought to assemble data on LBS users, (e.g. apps and mobile device brand) and move on to classify individuals based on characteristics and groups to which they may belong (e.g. *'Involved Approach'*). Literature

(e.g. Abeele et al., 2014; Ahmad et al., 2010; Karnowski and Jandura, 2014) has demonstrated how routine use of mobile devices varies between various ages, gender, locations and income resulting in disparate groups of consumers with different e-lifestyles. Each important cultural element is assigned a code (e.g. belief, awareness) describing an issue, behaviour, event or social concept. It was anticipated that the rich narratives from the unobtrusive data collection would potentially highlight emerging lifestyles (i.e. e-lifestyles and m-lifestyles). In addition, disconfirming evidence was also sought within early and later stages of data collection as recommended by Kozinets (2010).

4.4.6 Ethical Elements – Phase 1

Passive observation raises ethical concerns (e.g. informed consent). Arguably, websites chosen for this study can be regarded as public places where members willingly post comments: anyone could view posts without necessarily needing to set up an account or signing in. Wu and Pearce (2014) argue; where blogs are written in an open access manner, it is not necessary to seek permission from bloggers to quote and process words. In addition, Kozinets (2002) and Mkono et al., (2014) credit the *'lurking approach'* for providing access to a window of naturally occurring behaviour such as searches for information (e.g. mobile apps and devices) and 'electronic word of mouse' or User-Generated Content from members of the online community. However, as with any research project, ethics play a significant role, Dolbec, and Earley (2014, cited in Kozinets, 2015) state that, "*As with any social enquiry, ethical netnographic practice is grounded in the principle of informed consent and consideration of potential benefits and risks to individuals and communities" (p.286).* Kozinets (2002, 2006), emphasizes the potency of ethics in applying the netnography method (see also Appendix 13, Table 39). Thus, ethics must be observed at every stage of the research (e.g. data collection and interpretation or the dissemination of the results).

Examples of online observation research informed by elements of the netnographic approach are evident in the work of Williams, (2006) and Mkono (2012). In this study and informed by previous studies, the researcher did not have to disclose their presence as the selected websites were in the public domain. Instead, the researcher used pseudonyms to ensure anonymity and confidentiality of the respondents. This ethical approach is congruent with Mkono (2012) who conducted a non-participant study on constructive authenticity in tourist restaurant experiences: reviews were in the public domain and offered voluntarily.

4.5 Phase 2: Projective Techniques

Phase one (online observation) established key themes; awareness (familiarity) and experiences of respondents. In addition, this phase generated deep insights on mobile use (simple and complex) and unique lifestyles (online identity and e-lifestyles) emerging as members communicate (e.g. *'Involved', 'observer'* and *'Transactional groups'*). Such insight was used to inform the second phase (exploratory- Phase 2) of research as preliminary awareness, lifestyle characteristics and user experiences were used to develop key themes and stimuli input for cartoon tests. When looking at research objectives, one of the key objectives was to establish the potential role of e-lifestyles and situational context in influencing individual consumer response (Objective 3). Another goal was to explore actual consumer response patterns in LBS encounters (Objective 4).

Literature on LBS (e.g. Mir, 2001; Zhou, 2012) point to rapidly changing consumers' daily usage and purchase patterns concomitant with growing use of innovative mobile services. Juniper (2014), states that location services (e.g. navigation, tracking, social and local search) will shape consumer behavioural response patterns. Despite the significant influence of lifestyle on consumer behaviour (e.g. Ahmad, Omar and Ramayah, 2010: Valentine and Powers, 2013), differences exist between online and offline behaviour (Chiu, Kim, Lee and Won, 2014). There is therefore potential for new behaviours given the unique integrated features of the mobile device (e.g. GPS, scanners and camera). Furthermore, literature (e.g. Dhar and Varshney, 2011; Yousif 2012; Zhou, 2012) has indicated how some app users may be unwilling to use or adopt LBS. Given limited experience and use of innovative mobile services such as location services which are central to this study; conducting marketing research with innovative products is problematic (Broeckelmann, 2010). In addition, Koenigstorfer, Groeppel-Klein and Pla (2008) argue how user attitudes, motivations and needs towards these innovations (e.g. LBS) are subconscious hence not yet apparent in consumers' minds. Put more succinctly:

> *"Since the literature on the acceptance/adoption of innovation strongly relies on positivistic research designs, some facets of the motivations of individuals to use new technologies may remain unexplored"* Koenigstorfer et al., (2008, p. 218).

To mitigate this, Teddlie and Tashakkori (2003) recommend use of qualitative research methods. More specifically, Rook (2001: In Koenigstorfer et al., 2008) and Boddy (2005)

recommend the application of projective techniques to explore consumer responses to emerging mobile centred services.

4.5.1 Visualising LBS encounters

LB is an emergent aspect of marketing theory and practice, thus the exact nature and typical responses (present and future) remains unclear. In addition, a review of literature has indicated the potential role of emerging lifestyles in LBS encounters. Envisaging typical LBS stimuli, projected role of e-lifestyle and individual response (using traditional research methods e.g. survey) is difficult. Informed by recent studies (see Harwood and Garry, 2017), this research uses transdisciplinary techniques to capture the role of e-lifestyles as swell as likely responses in typical LBS encounters. Transdisciplinary approaches assist in visualizing potentialities (e.g. typical response) from a consumer perspective (Nicolescu (2002). One such way of framing contemporary consumption practices (e.g. LBS use) is via pictures (Donoghue, 2000): engaging ways of exploring response and gather consumer views (See, Koenigstorfer et al., 2008; Gannassali et al., 2013). Gannassali et al., 2013, p.117 see how pictures enhance the impact of persuasive communication, provide product relevant information and participants can express and provide their first intuition freely. Nonetheless, a pictorial approach to researching consumer response has limited application in marketing. This, despite endorsement of pictorial approaches as a useful means with which to describe, express and project experiences for analysis (Belk and Kozinets, 2005). As such, this research drew on projective techniques (e.g. cartoon tests) to provide an idea of typical LBS stimuli as well as investigate typical consumer response patterns.

4.5.1.1 Why use Projective Techniques

Projective techniques are methods that use *"...ambiguous stimuli to individuals and responses are interpreted by the researcher to reveal underlying characteristics of the individual concerned"* (Bryman and Bell, 2015, p. 227). Boddy and Enis, (2007, p. 25) refer to, *"... techniques allowing research participants or subjects to respond in ways in which they otherwise would not feel able to".* Research by Koenigstorfer et al., (2008, p.223) offer a more comprehensive definition adopted for this study: *"Projective techniques are defined as indirect and structured way of investigating the 'whys' of* situations (Webb 1992:125) …*rely on indirect questioning, ambiguous stimuli and a high degree of freedom"* (Rook, 2006). These techniques delve into and uncover inner (hidden) attitudes, beliefs, feelings and motivations of individuals.

Projective techniques can be traced back to the 1940s' in the field of clinical psychology as well as the 1950s' in marketing research (Weschler and Bernberg, 1950; Smith, 1954: In Catterall et al., 2000; Koenigstorfer et al., 2008). There are five types of projective techniques (associative; construction; choice or ordering; completion and expressive). In this research, projective techniques were used to explore consumer behavioural responses to location services (typical response patterns in near-real [simulated] encounters) and the role of e-lifestyles and situational context in individual response.

This research will use cartoon tests[2] referred hereto by Catterall et al., (2000) as a completion technique. These cartoon tests go as far back as Murray's (1943) Thematic Apperception Test (cited in Keiser and Prather (1990) and Rosenzweig's (1945) Picture Frustration Test (Catteral et al., 2000 and Broeckelmann, 2010). It is beyond the scope of this research to explain each of these hence focus will only be on the method of interest: cartoon tests. In this phase, cartoon tests have potential to generate rich data from a diverse group who have myriad experiences, feelings, beliefs, preferences and motivations towards LBS (see also Appendix 13 and Table 9.9). In addition, there is potential to establish the role of situational context and mobile lifestyles that could emerge where location services are used.

4.5.2 Cartoon Tests method and Studies that Used Cartoon Tests

In this research, respondents were asked to complete a conversation of the cartoon characters (filling in the empty spaces) depicted by empty speech balloons as recommended by Rook (1998: In Brockelman, 2010; Ramsey, Ibbotson and McCole, 2006; Koenigstorfer et al., 2008; and Broeckelmann, 2010). Given that cartoon tests are primarily used in psychology, there are relatively few studies in the marketing realm. Two marketing related studies (see Table 4.6) focusing on adoption of technology informed this study. For example, Koenigstorfer et al., (2008) used two projective techniques; Thematic Apperception Tests (TATs) and cartoon tests to uncover the conscious and unconscious motivations of young adults to use innovative technologies. Secondly, Broeckelmann (2010) conducted studies to establish consumer reactions to innovative mobile services and noted patterns in consumer preferences for location-aware advertising text messages. Broeckelmann (2010) study demonstrated that projective techniques, in particular cartoon tests are a useful method for gaining insight on

[2] According to Catterall et al., (2000) this is a completion technique where research participants are presented with a scenario to complete thereby expressing their own thoughts.

novel products and services. Cartoon tests were credited for, *"…very simple, quick yet focused, and robust method of data collection…due to projection, participants expressed views and opinions more freely, more spontaneously and with less reflection on socially desirable answers"* (Broeckelmann, 2010, p. 427). A summary of these studies showing key study areas and contributions is shown next in Table 4.6.

Table 4.6: Key Marketing Studies using Cartoon Tests

Author	Key Themes	Method of Analysis	Contribution to LBS study
Koenigstorfer, Groeppel-Klein and Pla (2008)	Acceptance/adoption, experience and use.	Content Analysis	Insight into true emotions, acceptance and adoption of novel services.
Broeckelmann (2010)	Situational & contextual use.	Content Analysis	Accurate projection of 'real' response behaviour

Both Koenigstorfer et al., (2008) and Broeckelmann (2010) demonstrated the effectiveness of projective techniques to uncover respondent's hidden and 'true' emotions influencing adoption of new technology based services where knowledge (e.g. consumers' beliefs, attitudes, intentions and actual behaviour) was scarce. It is hoped that the use of projective techniques in this PhD study will allow the researcher to capture emotional reactions (*'real response'*) towards LBS. In addition, there is potential to establish both positive and negative attitudes to used LBS formats. Furthermore, use of TATs and cartoon tests resulted in accurate and true projection of respondent behavioural response in ways that prevent socially desired responses. Levy (1985: In Koenigstorfer et al., 2008, p. 234) argues that projective techniques achieve intended objectives; enabling respondents to express themselves more fully and accurately. For example, cartoon tests have been credited for exploring consumer hidden feelings, attitudes, beliefs and motives (Saunders et al., 2016, p. 164). Thus, when compared to questionnaires for example: advantages of cartoon tests far outweigh the limitations in as far as answering objectives of this research (deeper insights into feelings, beliefs, motives). In this research, the objective of these tests was to understand the role of e-lifestyles, situational decision making and what respondents do when they are exposed to LBS opportunities. In addition, unlike non-participant observation where direct responses cannot be obtained from respondents: cartoon tests complement the online observation method. In phase one (Lacobucci, Gilbert and Churchill, 2010); providing more direct responses from responses.

4.5.3 Development of Cartoon Tests

Extant literature (e.g. Broeckelmann, 2010) indicated preferences to use location services in purchase situations where search costs can be reduced. Secondly LBS were used for brand experience (e.g. I'm here experiment for the BBC- BBC, 2011) allowing users to interact with brands and respond to location services. Thirdly, location services have also been used to generate interest and create engagement (see e.g. Xu and Gupta, 2009). Based on this sparse literature, cartoon test scenarios were developed and used. In addition, Phase 1 of the research (online observation) demonstrated familiarity and engagement with LBS; how users expressed benefits in LBA (e.g. deals, social layer); evidence of e-lifestyles (multi-way device usage and routine use of LBS) and the role of situational context in behavioural response (mobility, travel and emergency location services). In line with literature (Koenigstorfer et al., 2008 and) and insight from online observations, new cartoons were developed covering proactive and reactive responses (see Appendix 4 In-depth Interview Data Collection Instrument) that covered a range of LBS opportunities. Thus, cartoon tests were produced to test awareness in real encounters: two cartoons were used in each scenario and each had a speech balloon. In addition, blank spaces were used to enable respondents to provide rich in-depth responses (Broeckelmann 2010).

4.5.4 Pilot Test Procedure and Sampling

The first stage involved consultation with marketing academics on use of the cartoon test approach. In total four lecturers in Marketing and Psychology subject areas with a wealth of research experience in qualitative research were presented with draft cartoon tests. Thus, one of the expert informant was from psychology department and had experience with using projective techniques in numerous research projects. The remainder of the expert informants have used various qualitative methods in researching on innovative services. Therefore, these three had not used cartoon tests per se but sentence completion techniques hence could still make informed judgements on the suitability of the chosen method. Academics highlighted some changes that needed to be made. Firstly, the initial cartoon tests (i.e. images) were adapted from previous studies (e.g. Koeningstorfer et al., 2008- blank black and white generic images) hence did not relate at all to LBS. Secondly, some of the preliminary shopping contexts were perceived to be irrelevant for students as well as younger consumers. Based on this input (feedback) necessary amendments were made to the original scenarios. The researcher also

consulted a select group of respondents comprising students and members of the Leicester community to establish commonly visited retail stores as well as apps used. The choice of these respondents was based on the researchers' judgement; this group had diverse members whose ages ranged from 18 to 58. The group meets once a week as part of a charitable organisation that reaches out to communities through music and community work. Members comprised students and professionals residing in the Leicestershire area of the midlands. All the members spoken to owned at least one smartphone and exhibited some knowledge of mobile based advertising. Information from this consultation also informed choice of services used in final test scenarios. Following feedback, the researcher used Adobe Photoshop to produce better quality cartoons (see Appendix 4- In-depth Interview Data Collection Instrument).

A total of 38 participants for the pilot cartoon tests were recruited twofold: university students of varying ages at a multicultural Midlands city and employed adults within the Midlands area owning a smartphone and demonstrating experience with location based services. Participants ranged from first year undergraduate students to masters students' and working professionals. The sample was regarded as appropriate for this study. Literature (see Von Hippel's, 1986; Broeckelmann, 2010) demonstrated that students were among the first to adopt innovative products and services. Respondents were asked to complete preliminary cartoon tests and the responses analysed manually. Responses were grouped according to three LBS purchase based contexts (Costa Coffee shop, H& M and River Island clothes shops). A preliminary pilot test of draft scenarios indicated how portrayal of one gender in the cartoons could result in response bias hence two sets of cartoons were developed (male and female).

Two pilot interviews were conducted with one male and one female to gauge the time taken to complete the revised cartoon exhibits as well as adjust questions asked. For example, initially only 8 minutes for the interview stage and about 10 minutes for the cartoon tests. In practice, cartoon test completion took on average 20 minutes whilst the follow up interview lasted about 25 minutes. Therefore, the duration of this specialist interviews was revised in terms of questions, a few questions were quite repetitive hence were removed. In addition, the researcher was made aware of other trending apps such as Dripler and Keep, Unidays hitherto unheard of. Thus, this provided further insight to inform development of later questions for Phase 3 exhibits. Individual differences in response patterns also emerged from this pilot test. For example, greater preference for Coffee related LBS vouchers as well as H& M vouchers (immediacy/situational) as opposed to coupons for other services among female respondents. Therefore, this pilot test indicated a need for further changes to original scenarios. For example,

the font on some of the cartoon text messages was increased as well as inclusion of more scenarios reflective of various user contexts (e.g. brand engagement such as Leicester City Football club; interest and purchase based situations).

4.5.4.1 Testing Modified Scenarios

The second pilot run was carried out to test the suitability of new scenarios as well as aid further development of the cartoons. In this test, four adults from a similar group of older working individuals used in pilot test one was recruited. In the first cartoon (purchased based) **A1**, a 10 % offer available for **a month** at Costa (a British multichannel coffee house) was presented while **A2** had a limited time frame for the offer (immediacy), valid only **for the day**. The second cartoon **B1**and **B2** was about H & M (a British clothing retailer) with two situational contexts (valid for a month and for the day) where respondents were searching for casual clothes for going out (pleasure purposes). In the third cartoon, **C1** and **C2**, everything was akin to the situation in **B** save for the reason for buying clothes which in this case is formal clothes for an interview. Apart from exploring individual responses to LBS in different contexts, these pilot tests also sought to establish the role of lifestyles (e.g. loyalty: routine use) in influencing individual response to mobile advertising messages. Based on this pilot test, the researcher could test the suitability of cartoon test scenarios (wording and images used).

Furthermore, there was further scope to test varying forms of LBS (purchase based, interest, and engagement as well as brand experience scenarios). The first pilot test was mainly purchase based hence the second test closely mirrored themes from Phase 1 results (online observations). Scenarios used include the Food Village and Nandos (Engagement and Interest using offers/discounts); DMU Square Mile (Engagement and Interest); Voluntary Action Leicester (VALS- Brand Experience); Leicester Carnival (Raising Interest/Engagement) and Leicester City Football Club (LCFC-Brand Experience). As shown in Table 4.7, there was a strong identification (positive attitudes) with LBS deals offering value: (e.g. Food Village and LCFC celebrity meet opportunity): desire to respond.

Table 4. 7: Pilot Test 2 Response Overview

Scenario	Sample Response	Emerging theme
Food Village	*"He would go in and check out first then buy"* ***(R1, 34 years old)*** *"If he has not eaten yet and is feeling hungry..."* ***(R2, 48 years old)*** *"I will be concerned how they got access to my phone. But if I'm hungry, I'll be glad about the offer".* ***(R3, 27 years old)***	Response process for LBS; Situational; Decision Making; Perceived risk and response
Nando's'	*"She would be more pleased as she is actually inside… she already had intention to purchase something there…."* ***(R4, 32 years old)*** *"She is used to eat in company. She would try to convince her lunch appointment to meet a bit earlier to get the discount…. does not work, she would not come about the offer."* ***(Rr2, 48 years old)***	Situational Decision Making
DMU Square Mile	*"If John is looking for work he may pop in to see what vacancies are available."* ***(R4, 32 years old)*** *"He would go past."* ***(R1, 34 years old)***	Situational Decision Making
VALS	*"Feel like you have been hacked"* ***(R3, 27 years old)*** *"He probably would not recognise it and ignore it if it catches his attention and he had time available..."* ***(R2, 48 years old)***	Perceived risk influencing response; Situational Decision Making
Carnival	*"They may request to stop like messages…"* ***(R4, 32 years old)***	Lack identification
LCFC	*"She will jump in for the opportunity."* ***(R3, 27 years old)***	Value of Offers

During these pilot tests, a majority of respondents did not respond to location based services linked to engagement with voluntary activities, citing lack of direct offers. Based on feedback from the initial pilot test (no real difference in response between vouchers and coupons- male versus female), the River Island cartoon was removed. Secondly, the brand experience scenarios (voluntary) in the second pilot test were also removed as it was apparent that this engagement did not generate responses amongst LBS users. The final scenarios developed for phase two data collection capture key themes from Phase 1 reflecting user situations and scenarios emerging from online observations. Follow up questions were used as part of the semi-structured interview to glean more insight on behavioural response to LBS and consumer lifestyles.

4.5.5 Phase 2: Specialist In-depth Interviews in Cartoon Tests

In total 21 participants were recruited for the main cartoon tests (see Table 4.8). The number of respondents chosen is congruent with recommendations of Catterall et al., (2000) and

Koenigstorfer et al., (2008) who stressed the importance of qualitative richness instead of statistical power provided by quantitative methods.

Table 4.8: Overview of Phase Two Piloting and Main Data Collection

Author & Number of Participants	Pilot Test 1	Pilot Test 2	Store Types Chosen (Final Scenarios)
Catterall et -al., 2000 40 participants	38 Participants (university students and employed adults) completing preliminary cartoon tests.	4 participants (adult) testing suitability of LBS stimuli as well as role of lifestyles (e.g. loyalty and routine use).	H&M, Costa Coffee, Nandos Leicester Caribbean Carnival, Leicester City Football Club, Travel based LBS (e.g. Train and international air travel).
Koenigstorfer et al., 2008 26 participants			
Main Data Collection-This Study 21 participants	**Scenarios** Costa coffee, H&M and River Island scenarios. **Rationale** Based on Phase1 results	**Scenarios** Food Village, Nandos, Dmu Square Mile, Leicester Carnival and Leicester City Football Club **Rationale** Amended based on Pilot 1 feedback	**Rationale** Majority response to pilot two: revision of Phase 1 results/insights as well as input from pilot test 1

A seen in table 4.8, Catterall et al., (2000), study used 40 respondents whilst the later (Koenigstorfer et al., 2008) used 26 students. In addition, final store types were chosen based on insight from a) pilot tests 1 and 2 and b) majority responses to presented scenarios reflective of typical purchase and brand engagement or experience (see Tables 4.2 and 4.8 as well as section 4.3.1). Thus, in a way piloting the cartoons (e.g. presenting LBS scenarios based on phase 1 findings) was done to ensure consistency and ecological validity (Bryman and Bell, 2015): using methods (e.g. cartoon tests) that capture lived experiences of responses (see section 4.7.2). In this PhD study, phase 2 data collection took place towards the end of July

2016 over a period of 8 weeks during summer when there was a lot of shopping activity and recreation. During this period, students were on holiday hence it was anticipated to be the best time to recruit and engage students in research. In addition, it was expected that during this summer period because of enhanced shopping activity, the researcher could meet and then recruit younger shoppers (i.e. students) who could easily recall/relate to recent shopping experiences and have ample time to participate in the specialist in-depth interviews. Data collection lasted for 8 weeks, occurring at different times of the week (week days and weekends) and day (mornings and afternoons) to ensure that different shopping patterns were included.

4.5.6 Final Respondent Sample: Specialist In-depth Interview and Cartoon Tests

In terms of ages, the respondents were adults aged 19 years old and above owning a mobile device(s) which is smart (Wi-Fi, Bluetooth enabled/capable) and stay in the midlands area of UK. Previous research by Broeckelmann (2010, p. 426) used mainly a student population of adolescents and young adults perceived to be more open to innovative mobile technologies and services in many countries. This was based on Hippel's (1986) argument that this young target group were lead users of technology hence development and adoption of new technologies could be projected from their behaviours (Broeckelmann, 2010:427). In related research, Koenigstorfer et al., (2008) used respondents aged between 18 and 40 years of age. Salter (2006; cited in Yousif, 2012) identified the 12-24 age groups as seeking shopping on the go with mobile devices. Similarly, Persaud and Arzhar (2012) posited that younger consumers (18-24 years old) used mobile devices more often in consumption than older consumers. While acknowledging importance of younger consumers as potential 'early adopters', older participants were also included (Perks, 2012; King, July 2016).

This phase of the research adopted a non-probability convenience sampling approach (Creswell, 2014). Here, respondents owning a mobile location enabled device with some experience/awareness of LBS were chosen. Bryman et al., (2015, p. 429) defines conveneince sampling as a non-probability form of sampling where the researcher seeks to sample participants who are easy to access whose characteristics are relevant to answering research questions. Participants to the study were given £5 high street vouchers upon completion of the cartoon experiment. Respondents were provided with instructions for the tests and then presented with a cartoon stimulus to which responses were required in a written format.

Following this, a 25-minute individual in-depth interview was undertaken following guidelines of Barkhuus and Dey (2003) and Bryman et al., (2015). Here the researcher had opportunity to probe for further explanation of statements in cartoon tests. In line with interviewing procedures (Creswell, 2014), responses were recorded verbatim and the analysis was done using qualitative content analysis to establish emerging themes.

4.6 Phase 3: Focus Groups

The objective of Phase 3 was to further explore respondent perceptions of LBS at a more general level and the role of individual factors that could influence LBS response. In addition, this is an exploratory phase of research seeking to give richer description with focus on consumer beliefs, experiences, and perceptions. In addition, the face to face format provides rapport (Bryman, 2016) and may minimise socially desirable answers. The researcher believed that focus group interviews had a greater potential to answer objective 5 as well as offer rich insights. It has been highlighted that young mobile device users (e.g. students) are advanced users of innovative services (Assael, 2005: Weiss et al., 2013). Therefore, it was anticipated that some users might be more sophisticated in their LBS response. One of the objectives of this study was to establish how respondent perceptions (value and risk) and individual factors (e.g. life stage) may shape individual consumer response to LBS (objectives 5). Saunders et al., (2016, p.164) recommends use of qualitative procedures where the aim is to uncover hidden meanings, develop richer perspectives and build rapport to get cognitive access to responded data.

Previous studies (see Weijo and Hietanen and Mattila, 2014 [16 face to face interviews]; Williams, 2006 [9 online interviews]) followed up online observations with face to face interviews. Homer (2008) explored several research methods (e.g.in-depth interviews, observations, experiments and self-reporting methods) citing value of using complementary research to triangulate the respondent sample, perceptions, recollections and actions. This study sought among other objectives to obtain an in-depth understanding of consumer perceptions and response to select LBS in various contexts. This research examines a relatively novel area (see e.g. Parasuraman et al., 2007; Mir, 2011; Zhou, 2012) where overall consumer knowledge and experience of services such as LBS will be limited. Given that LBS is a relatively new area characterised by relatively low awareness levels, it was felt that focus groups would provide full interaction and debate (group interaction-group dynamics) on LBS and richer description.

By combing earlier data form observations and scenarios with focus group discussion, it was hoped to show some complementarity and triangulation of data as noted by Homer (2008).

Bryman (2016) defines focus groups as a group interview where several participants are involved in discussing a *"... particularly fairly tightly defined topic; and the accent is upon interaction within the group and the joint construction of meaning."* Kolb (2012) emphasizes interaction and highlights the role of a moderator who probes to uncover consumer desires, needs and wants. In addition, group discussions have potential to provide deeper insights into user experience and behavioural responses through encouraging participants to debate and challenge individual opinions (see also Appendix 14 and Table 40- benefits of focus group**)**.

Focus groups also have limitations. Creswell (2013) cites difficulties in recruiting respondents with certain characteristics (e.g. knowledge and experience) in common. To overcome this, Denscombe (2014, p.188) recommends use of small enough groups (6 – 9 people) which is both manageable in terms of recruitment, discussions and meeting scheduling. This approach has been adopted in the focus groups; focus groups are best suited to provide complimentary findings, allowing the researcher to gain in-depth understanding of factors such as attitudes (feelings, beliefs and motivation), familiarity (experiences) and individual factors. In addition, the very interactive nature of group interviews can help shed more light into mobile lifestyle characteristics, situational decision making and the role of key dimensions (value and risk perceptions) in consumer behavioural responses towards LBS.

4.6.1 Interview and Focus Group Planning

In developing the interview and focus group themes, the researcher took note of the ideas of Block (1996):

> *"In social research the language of conversation, including that of the interview, remains one of the most important tools of social analysis, a means whereby insight is gained into everyday life, as well as the social and cultural dimensions of our own and other societies." (*Bloch p.323, 1996 cited in Goulding, p. 59, 2002)

In addition, Goulding (2002) asserts that interviews and focus groups are the preferred means for generating a rich account of individuals' experience. In this research, interviews have potential to place the researcher closer to users' daily experiences with LBS potentially highlighting the imprint of varied behavioural responses on individual lifestyles. Given the limitations of surveys (standardised) as well as telephone interviews and electronic interviews,

this study has chosen offline focus group interviews. This PhD sought among other aims to understand meanings ascribed to LBS use by means of probing to gain significance and depth in data collected. And by including some open-ended questions, deeper understanding of awareness, preferences, experiences, motivations and meanings ascribed to use of location services in various contexts emerged as noted by Creswell (2014). A caveat, there are data quality issues to be considered by the researcher such as reliability/dependability, bias, cultural differences, generalizability and validity (Creswell, 2014).

Interviewing is a series of procedures (Creswell, 2013) where the researcher should follow specific steps. Conversely, Bryman et al., (2015) refers to a loosely structured document acting as a reminder (aide-memoire) of relevant areas to be covered. Ideas from Creswell (2013) that were developed include use of pilot testing to refine interview questions, choosing an appropriate and mutually convenient place to conduct interviews and the use of good interviewing procedures during the interview.

This study followed these recommendations with specific attention given to the interview protocol and consent form (Appendix 4- In-depth Interview Data Collection Instrument). Recording equipment was provided by the university and a spare voice recorder was also brought in for back up. In addition, Bryman (2016) recommends writing post-interview notes (reflective notes) detailing how the interview went, emerging themes, and noting down visual cues.

This research sought to explore user awareness, experience and behavioural response patterns to LBS in specific contexts. Following these nine steps was therefore crucial to gleaning deep insights from respondents. The researcher is knowledgeable in the area and thus personally conducted the interviews (see Table 4.7). Two Pilot interviews were conducted (one with a younger group and another with an older group) as recommended (Creswell, 2014) to allow the researcher to obtain feedback as well as audit adherence to aforementioned criteria. Whilst knowledgeable on LBS and lifestyle, the researcher also maintained a balanced approach in the dialogue (not talking too much or too little) to enable active participation (Bryman et al., 2015).

Table 4. 9: Types of Questioning

Question Type	Example question
Introducing	Please tell me about your use of mobile phones
Follow up	Could you say more about the reason why you chose that type?
Probing	Are you saying that ……?
Specifying	Why did you end up making that choice?
Direct	Do you receive location based adverts?
Indirect	What do your friends think about receiving offers on mobile phones?
Structuring	I would like to now move on to your shopping preferences
Silence	Allowing pauses to enable interviewee to reflect on subject
Interpreting	Do you mean that you shopping preferences have changed since you bought the smartphone?

In terms of question types, Kvale (1996) recommends nine different types of questions for use in interview (see, Table 4.7) which informed this study. Some of the objectives of this phase were to identify how e lifestyle characteristics and situational context may influence response and choice of LBS and to examine respondent perceptions (value and risk perception) and behavioural responses towards LBS messages. Therefore, focus groups are apt to generate debate and discussions around LBS; uncovering emergent lifestyles (mobile/wired/e-lifestyles) as well as demonstrate consumer experiences.

4.6.2 Respondent Sample

Initially, respondents were recruited from phase two participants exhibiting good knowledge and experience with location based services. As such a non-probability, judgemental sampling method was chosen. Lacobucci et al., (2010, p.285-p287) notes judgemental sampling as a method based on the ability to serve the research purpose or based on representativeness. Some elements of snowball sampling were adopted in this PhD study. Some respondents from Phase 2 recommended other experienced and knowledgeable people (friends or colleagues) to participate in these focus group interviews. The rationale being recruitment of a range of individuals with varied experiences based on referrals. Blumberg, Cooper and Schindler (2014, p.193) notes the judgement sampling often selects respondents meeting specific criteria (e.g.

different life stages). One of the objectives of the study was to select respondents with awareness, knowledge and experience with LBS. Therefore, only individuals currently owning smartphones and experienced with LBS use were selected. One of the key objectives of this study is to identify the influence of e-lifestyle characteristics and situational context on response and choice of LBS. Like Phase 2 of the study, adults aged 20-53 years (males and females) owning (a) smart (Wi-Fi, Bluetooth enabled/capable) mobile device (s) who reside in the Midlands area of UK were recruited. In total three focus group interviews comprising between 5-8 respondents were conducted. Each focus group lasted between 40- 60 minutes in length and was audio recorded. In addition, participants were given £10 Next gift cards upon completion of interviews. When conducting interviews, the researcher was guided by a focus group schedule as recommended by Creswell (2014).

Table 4.10: Key Themes in Interviews and Focus Groups

Key Theme	Explanation	Related Research
Awareness levels and attitudes towards LBS	Familiarity, experience, feelings, beliefs and motives	Bergmark, Bergmark and Findahl (2011), Valentine and Powers (2013).
e-lifestyles	Mobile lifestyles, wired lifestyles, e-interests, e-needs	Yu (2011), Hur, Kim and Park (2010).
Situational Context **Response Patterns**	Timing, location and social influence. Immediate, delayed	Karnowski and Jandura (2014). Kucukemiroglu et al. (2007), Rao, Shafi and Hasim (2014).
Branding oriented links	Knowledge and connection with brands	Aaker (1996: In Jung, and Merlin, 2003), Davis (2000), Wu et al., (2017).

The schedule was used as an ad memoire for the interview and LBS exhibits were also used as prompts as illustrated in the protocol. The schedule comprises themes (see Table 4.10) which are discussed in the next sections.

Attitudes and Awareness

Literature (e.g. Bergmark, Bergmark and Findahl, 2011; Valentine and Powers, 2013) indicated varying awareness levels of LBS. For example, Valentine et al., (2013) expressed how media habits of Generation Y consumers were determined by individual attitudes (feelings, motives).

While Generation Y consumers had positive attitudes towards technology and the internet, Mir (2011) observed how some consumers are motivated to receive personalised LBS.

E-lifestyles

In previous research Lee, Lim, Jolly and Lee (2009) note consumers' purchase behaviour centre around e-lifestyles while Yu (2011) observed the importance of e-lifestyles in shaping individual responses towards LBS. In this section, different e-lifestyle patterns are explored.

Situational Context and Response patterns

Karnowski et al. (2013) observed the pivotal role of context in LBS encounters: situational decision making at home ('Homezone'), on 'their way' (on the go) and hanging out with peers. A related research by Struckmann and Karnowski (2016) highlighted how context (e.g. location) and uses of the mobile phone supported individual lifestyles. When we think of situational context in consumer response this may include factors such as timing, when (location) and with whom (social influence) may determine individual responses. In the third section, the researcher seeks to establish the link between prior brand knowledge and LBS responses.

Brand oriented links

The final theme emerged from Phases 1 and 2 of this study. The potential role of brand oriented relationships in consumer responses is widely publicised (see, Davis, 2000; Wu et al. 2017). Bellman et al., (2011) and Neal et al., (2013) see the persuasiveness of branded services (e.g. apps); prior (rich) use experience with the brand may result in habitual behaviour. Similarly, Wang et al., (2016) posits how routine engagement with a brand may yield good relationships between a brand and individual consumers. Nonetheless, the persuasive effect of branded LBS (e.g. apps) on consumer attitude or behaviour is yet to be established. It is anticipated that in focusing on this theme of brand knowledge in the focus groups, the researcher will explore brand knowledge further.

4.6.3 Piloting Procedure for Semi-Structured Interviews

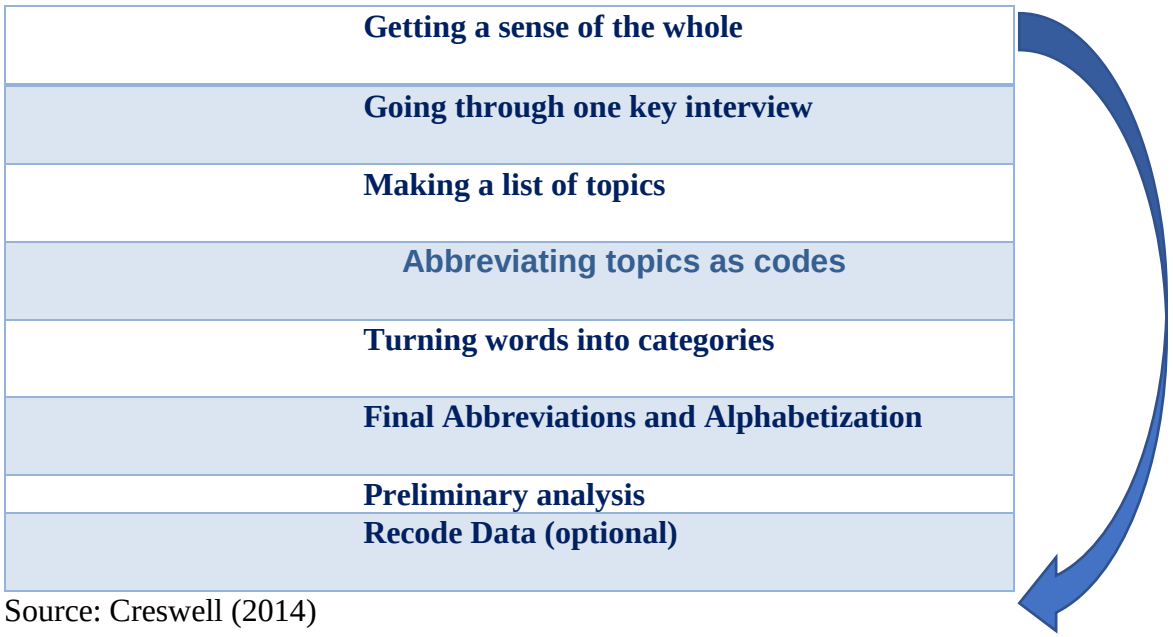
Blumberg, Cooper and Schindler (2014, p.58) see value of pilot tests in overcoming risks of research failure by, *"…using the suggestions of the respondents to identify and change confusing, awkward, offensive questions and techniques*." In this phase, a pilot test was

conducted with a smaller group of respondents to refine questions as well as techniques (e.g. visual aids). A total of four respondent representatives of the two life stage groups (students and older participants [in employment] were) recruited. Feedback from this pilot resulted in regrouping of some of the questions, for example, bringing in the section on individual factors just after response patterns as the two are closely linked.

4.7 Data Analysis Process for Phase 2 and Phase 3

Creswell (2014) recommends a six-step data analysis allowing the researcher to obtain meaning in qualitative research (see Figure 4.3). The first step involves **organising and preparing the data for analyses** where the researcher transcribes the interviews, types up field notes as well as organising the data. In this research, a twofold process was followed given the two types of data collected (cartoon test write ups and follow on interviews). Starting with the cartoon tests, the scripts were organised based on gender and pseudonyms were used (e.g. R1CTM- Respondent 1 Cartoon Tests Male and R1CTF- Respondent 1 Cartoon Tests Female). Next all completed cartoon test responses were scanned and saved on computer using qualitative computer software NVivo. Creswell (2014, p.195) cites the efficiency provided by computerised programmes in organising, sorting and locating information in text or image databases. Interviews were recorded using a voice recorder and immediately saved on a computer. These were transcribed verbatim and pseudonyms used to represent all participants; male and female (e.g. R1INTM- Respondent 1 Interview Male and R1INTF – Respondent 1 Interview 1 Female respectively). As previously stated, two data collections were conducted. Specialist interviews lasted on average 45 minutes, whilst the focus group lasted approximately 60 minutes. Halcomb and Davidson (2006) credit manual transcription for being central to the validity of qualitative data collection. In addition, manual transcription brings the researcher closer to the data, allowing them to be more immersed and acquainted with data at an early stage. For each of the two qualitative procedures for Phase 2, summary notes (reflective notes) were written to provide an overview of findings. This is recommended by Tesch (1990) cited in Creswell (2014) who see the dual role of these notes both as reminders as well as providing rich narratives for main findings when writing up.

Figure 4.3: Tesch's Eight Step Coding Process



Source: Creswell (2014)

Following on, the researcher moved on to step two; per Creswell (2014) that of **reading through all data**, here the researcher read excerpts of all transcripts to gain an overview of responses. Tesch (1990) cited in Creswell (2014) specifically refers to eight steps in the coding process (see Figure 23). In line with recommendations by Creswell (2014), notes were written within the transcripts using a different colour pen as well as highlighting key phrases. This process enabled the researcher to establish general thoughts.

Next, was **data coding** (see Appendices 6, 7 and 9), defined by Creswell (2007, p.148) as, *"reducing data into meaningful segments and assigning names for the segments."* Put differently, Belk, Fischer and Kozinets (2013) refer to the *emic* and *etic* nature of codes. The former is the same as *'envivo'* thus drawn directly from the words used by respondents. In contrast, the latter refers to 'mainstream' words or concepts that do not emerge from what respondents say but stem from the field of study (e.g. location based services and lifestyle field). For this study, a combination of *emic* codes emerging from data in interviews and focus groups and etic codes coming from some of the ideas that emerged in previous research notably e-lifestyle properties (e.g. e-activities). Given the sequential multi-method approach, the data analysis enabled the researcher to obtain a snapshot of consumers real lived experiences, capture emerging response behaviour as well as making comparisons from earlier findings. In this study, Phase 2 and 3 coding was done manually to enable the researcher to gain real and deep insights about data (Goulding, 2002). Belk, Fischer and Kozinets (2013) refer specifically

to two ways of coding; here key phrases were highlighted followed by inscription of words in the margin and the breaking down of sentences into categories as recommended by Rossman and Rallis (2012). In line with Tesch (1990: In Creswell, 2014), the categories were then labelled. In the last stage of data analysis, codes were classified into themes. According to Creswell (2014) themes are large information sets comprising numerous codes combined into a common concept. Once the themes were established, it was easier for the researcher to interpret the data through comparison. In this PhD, the researcher combined codes into themes emerging from the data to enable a better analysis. Example codes that were combined include location, timing and situational context which have situational decision-making characteristics. Similarly, brand, brand familiarity and brand value were combined to form the brand knowledge theme (see Coding Example, Appendix 9).

4.7.1 Ethical Elements- Interviews and Focus groups

Every research project is guided by principles determining the conduct of individuals (researchers) as well as stipulating their responsibilities. A simple but all-encompassing definition is provided by Kolb (2012, p.13) who state that, *"ethics provide a system that helps a person to determine what is right and good from what is wrong and bad…guidelines that will help in making decisions."* Various research bodies provide the code of conduct to inform researchers on ethics. Denscombe (2007) contends that research ethics should be observed throughout the entire research process starting with data collection, analysis and reporting of findings. Similarly, Brown, Sutter and Churchill (2014, p.25) emphasize the potency of observing ethics by researchers succinctly highlighting consequences of failure or ignorance of ethical guidelines; *"Bad research that violates the trust of study participants will only make it more difficult and costly to approach, recruit, and survey participants."* As for the parties involved in a research project who may be affected by ethical issues, Aaker et al.., (2013) lists these as (1) the sponsor of the project [e.g. De Montfort University] (2) the researcher and (3) the respondent who provides the information. Therefore, ethics in a marketing research project such as this PhD involves all these stakeholders. This research was approved by the ethics committee for De Montfort University, furthermore, guidelines from The World Association of Opinion and Marketing Research Professionals (ESOMAR), Market Research Society (MRS), Marketing Research Association (MRA) and De Montfort University will guide the entire research process. To address this, Aaker et al., (2013) specify the rights of participants in a research project as;

- The right to privacy and safety.
- The right to know the purpose of the research
- The right to decide which questions to answer (see also Consent form in Appendix 4).

Furthermore, for the second and third phases of the data collection (specialist in-depth interviews- Appendix 4), cover letters and consent slips were provided informing respondents of the research area, purpose of research as well as assurances that the research has been sanctioned by De Montfort University ethics committee. In terms of the responsibilities of the researcher, Bryman et al., (2015) highlighted key areas to a) ensure no harm participants; b) ensure that informed consent is obtained from participants. In this PhD study, prospective participants were provided with all the information about the research to enable them to make informed decisions as to whether they wanted to be part of the research study. Regarding informed consent, the researcher noted how mobile devices ('personal utensils' and intimate devices) are carried on the person always and this may generate concerns of intrusion (e.g. privacy risk: Shankar et al, 2010). In addition, this research delves into people's lifestyles thus a potential to encounter sensitive issues; the researcher will have measures to minimise the ethical concerns by first obtaining consent from participants (see consent form in Appendix 4). In line with ESOMAR (www.ESOMAR.com) research guidelines, respondents will be allowed to withdraw at any time during the research process. Furthermore, Bryman et al., (2015) note the invasion of privacy- the extent to which the respondent's privacy may be invaded through use of covert methods. Therefore, respondents have a right to refuse to answer certain questions whenever confronted with sensitive or somewhat private questions.

This research will also ensure that respondents' data is stored securely using a password protected hard drive. Secondly, all the data for this study will be stored as a backup on a machine at university; a secure and encrypted device. In second and third phases of data collection (specialist interviews and focus groups), the researcher informed respondents of the true purpose of the research and how information will be used and stored. All respondents for both phases of the research gave consent to their data being used as well as being notified of their right to withdraw at any stage of the research process.

4.7.2 Validity and Reliability

According to Creswell (2014) validity is concerned with accuracy of findings looking specifically at trustworthiness, authenticity and credibility. Stated differently, Bryman et al., (2015, p.50) refer to, *"The integrity of the conclusions that are generated from a piece of research".* Creswell (2014) reiterates that validity (validation) takes place throughout the entire

research: ensuring accuracy starting with objective setting all through to data analysis. In this study, the same process was followed in data collection to ensure consistency. Firstly, all online observations were observed for an hour twice weekly at the same time, days and the same observation sheet was used to record the findings. In all phases of the research, reflective notes were written to provide a fuller account of interview proceedings. Thirdly, the three scopes of content analysis were applied to all the data analysis (exception of online observation which used both manual and NVivo analysis) per Goulding (2002) guidelines in data analysis.

The researcher followed validity guidelines per Denscombe (2010), notably comparing data with other sources, identifying emergent themes in transcript in an iterative way. In looking at reliability and external validity based on guidelines by Denscombe (2010), pilot tests helped to ensure that representative LBS (e.g. apps) and user profiles (e.g. demographic and socio-economic class factors) were chosen. This was then compared to previous literature (e.g. Assael, 2005; Persaud et al., 2012) which pointed to widespread acceptance and use of mobile device as well as response to location services by younger people most of whom are students and young professionals. Therefore, choice of interview respondents was informed by both literature and pilot tests results. Saunders et al., (2016, p. 725) refers specifically to value of triangulation as a validation process for interpretivists, *"... it adds depth, breath, complexity and richness to their research".* In addition, Creswell (2014, p.201) states, *"If themes are established based on converging several sources of data or perspectives from participants, then this process can be claimed as adding to the validity of the study.* In this PhD study, use of a sequential multi-method (online observation, in-depth interviews involving cartoon tests and focus group interviews) provided deeper insights from various respondents and enabled the contextual aspects for participant actions or choices regarding LBS to emerge.

Triangulation of data was achieved in this study through three data sets- (see Table 4.2-Overview of Sequential Multi-method Design). Such triangulation enabled the researcher to check the accuracy (Lacobbucci and Gilbert, 2010; Creswell, 2013) of reported data as each phase of research informed successive stages. It also, as Thurmond (2001, p.255) suggests, offers the "*…potential of exposing meaningful information that may have remained undiscovered with only one data collection technique."* With regards to ecological validity, this refers to capacity of chosen social scientific findings to mirror peoples' actual lived experiences in natural settings. More precisely, Bryman et al., (2015, p.51) refer to propensity of chosen methods to capture, *"...daily life conditions, opinions, values, attitudes, and knowledge base of those we study as expressed in their natural habitat."* This study comprised

three phases; Phase 1, online observation where respondents were observed in their natural habitat, the online environment. The use of cartoon test scenarios in Phase 2 were generated partly by respondents and enabled respondents to freely express feelings and experience with location services and mobile lifestyles. Commenting on the value of a multi- method approach, *Donoghue (2002, p.47)* expresses how, *"Combining projective techniques with informal interviewing will enhance value".* Some of the participants in phase two could expand further/explain their expressed choices in the cartoon tests, which enabled the researcher to verify that respondent patterns were valid. In addition, LBS exhibits used in the last phase provided a close replica of what an actual LBS message sequence would be.

Reliability refers to the consistency of approaches across different researchers and projects (Gibbs, 2007 in Creswell, 2014). This is put more clearly by Saunders et al., (2016, p.726) who put this as, *"The extent to which data collection technique or techniques will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data".* While it is anticipated that if future research uses similar data collection tools/analysis, similar findings may emerge, there is however a possibility that some results may differ. Denscombe (2014) cites difficulties in ensuring consistency in interviews- for instance in recruiting the same individuals (same interaction, rapport and experience) to replicate this study (e.g. focus groups). Nonetheless, every effort was made to record the procedures as well as choose respondents with adequate experience with smart mobile devices and location service use. In this study, consistency was achieved in the three phases of the research. In Phase 1, observations were carried out twice a week on the first and last day of the week (I hour for each session). In addition, all observations were recorded using a standard observation form where threads and reflective notes were input and a new entry made on NVivo each week. Secondly, for phase 2, an interview protocol was used- similar questions were asked of each participant with some flexibility for example where laddering questions were asked. In the final phase, the focus group was guided by key themes which had been adjusted further based on insight from Phase 2. The interviews were conducted by a researcher who is knowledgeable about the process and all the interviews were recorded to ensure consistency.

Chapter 5

Research Findings

5.0 Introduction

This chapter presents research findings from the three phases of this study (online observations, specialist interviews (cartoon tests) and focus group interviews. Section 5.1 reports findings from Phase 1, seeking to examine current individual attitudes and experiences towards LBS in the UK. The section concludes with a summary of Phase 1 findings and implications for the next phase in section 5.1.8. Section 5.2 reports on the first part of Phase 2 research findings- the cartoon tests, demonstrating close to real-time customer response patterns in LBS encounters. Section 5.3 presents in-depth interview findings, focusing on the role of lifestyles and situational context in influencing consumer response- follow up from the specialist interviews. This is followed by Section 5.4 which presents a summary of Phase 2 findings and highlights some implications for the final phase of data collection. Section 5.5 presents findings from Phase 3 of the study, providing explanatory insight into individual factors influencing consumer response to LBS and Section 5.6 summarizes Phase 3 findings.

5.1 Research Findings: Phase 1

Phase 1 was exploratory in nature, seeking to gain an overview of individual familiarity/awareness and experience of LBS amongst UK consumers. In total, three websites were observed and insight from member comments was gathered. Observation of member conversation was chosen in this phase given the ability to capture 'unique' new online personalities (attitudes and feelings) and capture the spontaneous flow of information: explore 'real' consumer experiences (Arruda-Filho, Cabusa and Dholakia, 2014). A total of 58 threads were observed and this enabled the researcher to glean deep insights from respondents. The themes and sub-themes that emerged have been linked to literature as shown in Table 9.9 in Appendix 15.

5.1.1 Profiling Mobile Device Users

An initial analysis of findings pointed to three distinct online groups contingent upon contribution on forums (Quora, the Register and BBC). These break down into those with a an*'Involved Approach, Observer Approach* and the *Transaction Approach'* (See Table 5.1).

Table 5.1: Characteristics of Online Members

Involvement Category	Online Engagement Characteristics
Involved Approach	• Multi-platform use • Highly active • Demonstrate expertise • Vision of what's going on • Collaborative approach to group discussions • **Regarded as an expert by other group members**
Observer Approach/ Involved but deliberately obstructive	• Makes regular contributions • Posts minimal content • Very argumentative about features and technological points of information • Not corroborative • **Not regarded as an expert by other group members**
Transactional Approach	• Asks questions • Make irregular posts • **Show appreciation and seek more advice** • Do not argue

Source: New types of online member categories emerging from this Study

Regular contributors on the forums are highly active and regarded as expert by others (e.g. ***A, SIG)*** were classified as having an 'Involved Approach'. The second group that used an 'Observer Approach' are involved but obstructive. Members of this group posted minimal content on a regular basis; were not regarded as experts and were discordant. The final group adopted a 'Transactional Approach', making irregular posts, asking questions (genuinely sought advice) and were appreciative of member contributions. The Involved users appear highly engaged in areas such as complex device usage; experience and multi-way device usage, whereas the Transactional users appear to make irregular posts and as such feature in

discussions covering some of the eight dimensions. In terms of behavioural response, we can see some characteristics of two distinct adopter groups here that linked to Rogers (1995) Diffusion of Innovation; early adopters who act as opinion leaders ('Involved Approach') and late adopters ('Transactional Approach').

5.1.2 Familiarity and Extent of Engagement with LBS; Use for utilitarian purposes

Research Question 1- What are current UK consumer attitudes and familiarity towards Location Based Services?

As indicated in the previous section, members demonstrated varying levels of involvement and participation in forum discussions centred on LBS. Consequently, familiarity and engagement (basic versus complex usage) with mobile devices and LBS varied widely among members. For example, where members had basic mobile device usage (e.g. utilitarian – making calls) there was limited engagement with LBS:

> *"I switch off everything (GPS, wifi, mobile data) on my phone unless I actually want any of those things - basically, most of the time it is just a mobile phone (or as close as I can make it) …."* ***(PI)***

Despite having a mobile device with LBS capabilities, this member chooses when to enable location functions, relying instead on basic use most of the time. Similarly, other members articulated knowledge and benefits of location services but indicate preference for making calls as stated in the next excerpt:

> *"There are some good ones too though, things like geotagging on images if that counts. If you are hiking a real physical compass would be more useful surely? What if the phone runs out of battery…? I'd rather save the phone battery in case I got lost/injured and use it for making a call."* ***(A)***

Surprisingly, this member is a regular on the site, regarded as an expert and active (*'Involved Approach'*). Nonetheless, he displays selectivity in device usage and engagement with location services. Clearly, this member is familiar with LBS (refers to geo-tagging) but opts out of complex device usage and engagement with locations services. There is an issue here with battery life as well as technical concerns. Despite this selectivity in LBS use, other members argue that receipt of LBS might be automatic:

> *"No, you may not opt-out from location-tracking for specific ads, just for ads in general. By the way, when you opt-out of location-based services for iAds, you still get*

the ads; just not targeted ones." ***(D)***

"I have an Android phone, and when using WiFi location before enabling GPS, it used the nearest cell station, now it puts the pinpoint on my house, with roughly a 100m "accuracy" (sic) .Exactly the same here. There's also different companies offering location based services using wifi, e.g. Navizon." ***(SIG)***

Thus, it is implied that for some phone brands such as Apple, users are familiar with LBS and may also not have much choice on location services received (automatic exposure). It is interesting to observe that despite the users' interests; some online members opine that Apple will still push unwanted adverts using GPS coordinates. Expressed differently, users of other brands and operating systems (e.g. Android) were familiar with LBS and engagement with the brand appears to be somewhat voluntary *("…before enabling GPS…").*

One surprising find was how sharing location details with friends is somehow considered a form of basic device usage: *"To Broadcast… Pretty basic: users want to share their locations with friends"* ***(SD).*** This indicates a more hedonic use where mobile device coordinates are used to inform friends of ones' whereabouts (broadcast). Consequently, this points to a routine mobile device usage 'on the go' (different locations) signified in this case by use of a plural ('*locations'*) when referring to place. This suggests relatively complex usage behaviour, where it is dependent fully on the individual's situation, showing high engagement with location services through the mobile lifestyle.

One key finding was use of location based social networking (LBSN) by members of a parade (Gay and Lesbian Mardi Gras parade) to 'check in':

"…Many social media users checked in at a location they simply called ***"****Mardi Gras.****"*** *Interpreting that location and the many different coordinates all associated with the same name…"* ***(SF)***

Clearly, there is social value in location service use where numerous members sharing a common cause register their presence at a location. When we think of traditional activities, socialisation would normally involve face to face interaction. Thus, motivation to *'check in'* is reinforcement of social relationships. Interestingly though, this member (**SF**) appears to be of a *'Transactional Approach'* demonstrating complex involvement despite their limited engagement on the online forum (see Table 5.1 and Section 5.1.1). Nonetheless, the narrative not only illustrates complex use and engagement with LBS but evidently shows fusion of traditional activities (e.g. Mardi grass parades dating back to the 17th and 18 centuries-

www.mardigrasneworleans.com) with contemporary location oriented activities (e.g. 'checking in' to a favourite place).

Another key find is use of mobile applications (apps) to access and respond to mobile oriented services. For example, one member states:

> *"…I personally integrated Foursquare check-ins/tips and Food spotting photos into my app and saw a lot of positive feedback. No one has time anymore to play around with 6 LBS apps to do what they need."* ***(CR)***

Thus, the member is more discerning, time poor, seeking consolidated apps and services meshing with unique lifestyles. In addition, this member has positive attitudes towards LBS citing aggregated location service apps and tips such as Foursquare.

5.1.3 Multi-way use of mobile devices and Evidence of e-lifestyles

Research Question 2- What is the range of experience with LBS across different customer groups?

A proportion of members indicate willingness to use multiple devices (e.g. TomTom navigation and mobile phone) to access location services across various platforms as stated below:

> *"One thing TomTom should do is allow the devices (i have a go 710) to provide coordinates back to the mobile phone it is connected (via bluetooth), so the phone can use them in services such as Windows Live Search &* obileMaps"* ***(A)***

Here, the member (*'Involved Approach'*) expresses interest in using location enabled devices to access various services. Clearly, there are positive feelings towards location services. In addition, this excerpt provides evidence of multiple device use (phone and satellite navigation) as well as mobile lifestyle where users want to remain connected all the time. Similarly, others expressed how a location enabled GPS device (e.g. Garmin) is pivotal in coordinating tasks (e.g. personal diary and travel log):

> *"Gosh, a mobile GPS enabled device remembering where it's been? My Garmin satnav has been doing that and keeping track logs of everywhere I've been for years.*
> ***(HR)***

There is evidence of common positive attitudes towards tracking by both members although clear brand preference emerges- TomTom in the first excerpt and Garmin in the second. Other members also expressed how accessing LBS via mobile is becoming the norm:

"Your mobile device provides information about location; your text messages can provide context about your needs. Better yet, if you can text Google while being mobile about your needs, location-based services can get the information to you very, VERY quickly." ***(BB)***

Clearly, the mobile device is a centre for LBS here, where GPS coordinates are used to provide location information and context. Furthermore, convenience in LBS is evident here. Others express negative feelings regarding how location services tap into user lifestyles:

"There are individual points miles from where I know I went - but the clusters show where I've been. Also since it contains dates you could get a pretty good idea of where I've been and also patterns - such as where I work, where I am during the day vs at night…." ***(GS)***

Thus, where users feel their routine activities are constantly monitored; tracking movements potentially raise concerns. The role of expert knowledge, social influence and simultaneous use of devices is also expressed. For example:

"I own an iPod Touch and an Ipad 2 because I make money developing on their platform…" ***(AC)***

"I think you could come up with a number of ideas just by going through your daily routine with a notepad" ***(PJ)***

Clearly, there is a link between device ownership and routine service use, first excerpt shows use of multiple devices to develop something on a platform. This appears to be an ongoing activity whilst the second excerpt, specifically refers to routine use of a notepad: points to multi-way use of devices and mobile lifestyles (daily routine).

5.1.4 Situational Context and location service use

Most online members made positive reference to using mobile devices to access LBS in specific settings or situations. In exploring situational context, four sub-themes emerged; mobility in location services, travel location based services, complex use and family lifecycle, and lastly emergency based location services.

5.1.4.1 Mobility in location services

This sub theme focuses on user search for location services when 'mobile', which could be within their environment or unfamiliar ones. Some comments demonstrate varied use of location services when one is on the move. For example:

> *"…you're looking for a restaurant or the closest grocery store (very, very trivial problems - a truck-tire dealer that carries Goodyear fleet traction tires in 19.5 sizes is much more complex and closer to my needs) having the results return faster than you could look it up in the Yellow Pages or call your cellco's 411 (for a fee) …If you consider that we've all gotten to the point that we ignore on-line, television, radio or print advertising 99% of the time (as it usually doesn't apply to our current task), how hard is it to ignore the irrelevant adverts on the mobile phone."* ***(BB)***

Clearly, there are positive attitudes towards contextualised, tailored offers delivering convenience (e.g. reduced search costs), in line with Pescher et al., (2014). Users see more benefits in location based services than from traditional media (e.g. television and radio). Despite expressing clear benefits (quick access to information and location services), some members were indifferent to irrelevant adverts. For example, member (**BB**) makes bold statement (authoritative) that nearly all people *("…we've all … 99% of the time…")* ignore irrelevant adverts. Not surprisingly, this member adopts an 'Involved Approach' and an authoritative stance (use of *'you'* and then *'we'* to highlight what is acceptable).

5 .1.4.2 Travel Location Based Services

For yet others, location services (e.g. apps) are used to search for transport (travel) related services. For example, when travelling by car:

> *"If I'm on a trip, and my car is telling me I have about 60 miles left in the tank, I'm probably gonna be looking for fuel. If I can look at an app that tells me prices, and I see that in another 30 or 40 miles, prices drop significantly, or go up significantly, that is very useful information."* ***(HC)***

Here, there is value in location apps used to access proactive LBS meshing with user needs; reduction of physical search costs where a clear need exists for a service as well as potential cost savings. Observations also showed how commuters using public transport access travel based location services:

> **"***…the next bus/train/subway coming? There's an app for that in many cities now. I*

use TripIt to check into airports and also to get warned of flight delays. Plus it helps me pick my seat (it's gotten me better seats often). Other apps even let you look at the flight schedule…you can figure out if your brother…" ***(SR)***

This excerpt highlights multiple benefits of LBS (e.g. travel apps) as well as individual experience with location services. The respondent (**SR**) appears knowledgeable about specific apps used to check services; travel related information and reserving flight seats. Interestingly, this app is used to 'check in', to access services at the airport as well as locating other passengers.

5.1.5. Complex use, value-seeking and lifestage

The importance of location services for emergencies was highlighted by some members (in line with literature, Dhar and Varshney 2011):

"... SARLOC which is used to identify the location of missing people who have a GPS smartphone…the user must have a data connection and location services enabled (preferably GPS obviously) how long would it take before network operators are forced to record the location of every single call you make." ***(B)***

Benefits of emergency LBS (e.g. tracking missing people) are clearly articulated with emphasis [use of capital letters]; examples such as SARLOC used by mountain rescue teams are provided. Whilst positive sentiments are expressed for rescue oriented LBS, there are also concerns (negative feelings) over abuse of location information by third party operators.

Member attitudes towards LBS were shaped by differentiated brand connectivity:

"When iOS didn't have in-app maps integration, no one wanted to be kicked out to Google Maps. On Windows Phone 7 I have users who want door to door directions in our app. In some ways, Microsoft's Windows Phone 7 campaigns were right on the money... Get in, get out. That's especially true for LBS." ***(CR)***

"…the followers of the Church of Jobs, which is exactly how Apple cult fans are behaving, but they don't want to hear it…. I thought Apple fans would see Apple are spying, when shown Apple's own words and their fans get to see Apples own intentions to plan to integrate spying into Apple products. ***(Z)***

In the first excerpt, users of Android enabled devices (e.g. Windows Phone 7) expressed positive feelings (attitudes) towards use of LBS. Quite surprisingly, others had negative feelings towards IOS (Apple) based LBS users; seen as spying. Apple users are seen here as disciples of the founder. This suggests that variation in brand perception may have some impact on potential LBS response. Usefulness of location services is linked to phone brands which link to two key operating systems:

> ***"****Current Nokia WP7 devices have Nokia Maps, Nokia Drive, Nokia City Lens, Microsoft maps. The mapping and location based services are well covered, free of charge and of a better quality than anything on iOS."* ***(A)***

There is limited indication that location services (e.g. navigation) using Android (Nokia branded devices) are superior than IOS and consumers are savvy about mobile devices for navigation, apps (Nokia Drive) and aggregated location information (e.g. train, bus using Nokia Lens). Other members however perceived no differences between brands as stated below:

> *"But loads of people love their 'location aware' apps. They are a very popular section of both apple and android app stores."* ***(BB)***

This member appears quite knowledgeable about location aware apps cutting across different brands. As an active member with and *Involved Approach*, ***BB*** makes an authoritative statement commenting on a supposed majority consensus- apps that most people love.

Findings also demonstrated how other respondents use location services in multiple situational contexts:

> *"…-does the user use public transit or drive or carpool... is the user a homeowner... is the user single/married/a parent… is the phone lost when it enters secure locations… where are those locations and are they open to Apple products…what non-Apple products does the user sync with/route through… how many of our phones cluster on transit vehicles…where are our greatest daily/hourly first and repeat proximities in AM and* ***PM commutes and social venues?"*** ***(FD)***

Interestingly, this member refers to a specific user group (e.g. a van or carpool driver), specific apps in different contexts (e.g. locations) where location services can be accessed. Secondly, reference is made to personal factors (e.g. lifestage - single/married /parent), and expertise with LBS is evident. The idea that location services are tied to specific time periods (morning or afternoon) as well as social events was interesting here.

5.1.6 Expressed benefits and response to LBS

The expressed benefits sub-theme was split threefold; branding choice, value in LBS deals and value in social layer. Of these, there was strong evidence of brand familiarity which in turn defined consumer lifestyles.

5.1.6.1 Evidence of brand familiarity

As expected, some member attitudes are also shaped by value: benefits of LBS in price savings via discounts and money off coupons.

> *"Send a letter with some vouchers to every address with an active club card and a spend of over £100 per week within 30 minutes of this Tescos"* ***(WFT)***

> *"I'm still not happy about them using my AP as a node in their wifi map without my permission and without offering me at least a token payment to recognize the value (albeit small) of the service that my AP is providing to them."* ***(J)***

A clear contrast between excerpts one and two whereas the former cites value in vouchers tied to location, the second highlights demand for a token payment for enabling access to user device. There is therefore an apparent selectivity of access; value of deals in incentivizing LBS use. Apart from monetary value, others see value in reduced search costs (time savings) as stated below:

> *"Another part of time-savings is consolidation…recent Foursquare, Instagram and Food spotting deal, it consolidates multiple location based services and creates a single unified flow for users...No one has time anymore to play around with 6LBS…"* ***(CR)***

> *"I want value and I want it fast…services that work together to deliver something of value to us. Something of an aggregator.* ***(OC)***

Clearly, members are more discerning and time poor, seeking consolidated apps and services meshing with lifestyles (e.g. checking in on multiple platforms e.g. Foursquare, Flickr, Instagram, Food spotting). Furthermore, there is emphasis on time saving apps; these enable users to readily access multiple deals 'on the move'. The narratives reinforce the potency for location services providing spontaneity and delivery.

When thinking of UK consumers, they are perceived to be savvy bargain hunters:

> *"British consumers are savvy and love a bargain. I expect the UK to be at the leading edge of social commerce within 12-24 months. Update: Directions Magazine recently posted an article on how only 8% of UK grocery shoppers are interested in real-time in-store coupons. But a whopping 51% want coupons in advance…."* ***(BJ)***

Thus, there is an indication that some UK consumers prefer location services offering coupons. Put more succinctly, fewer consumers are interested in LBS offering immediate savings (real time) whilst a majority want future dated coupons.

5.1.6.2 Value in Social Layer

Social connectedness and experience was cited by some as key motives for using LBS.

> *"…is a service that locates your friends via their mobile - sniff – 'Social Network Integrated Friend Finder' (www.sniffu.com) which launched in the UK last month. It's LBS … locates your mates with one text. You can also use it through that other modern wonder, Facebook."* ***(CN13)***

> "*Often when I check in I'll see a friend of mine is nearby, or, someone who I'd like to meet. Let's be honest, if you know Steve Jobs was nearby at a cafe wouldn't you consider going over to meet him? I would. Foursquare, Gowalla, Whrrl, etc are great for that."* ***(SR)***

Clearly, there is social currency in LBS use; social networking sites and related apps which have potential to provide seamless access to friends in specific locations. Even more, there is greater value in linking up with famous people (interests or hobbies) where one can even boast of 'unique' celebrity encounters.

Another aspect of a social layer in LBS is competitive social networking as stated below:

> *"I've heard of college friends wanting to go to one bar over another on a Friday because they are one day away from becoming Mayor there. A housemate of mine dragged himself out of bed to go to the gym because they were one day away from getting the "Gym Rat" badge on foursquare…"* ***(SD)***

> *"…see where friends are at; heatmap of where are the hot places to be spotted"* ***(WN)***

Clearly, location service use for fun related social activities is gaining traction (in line with Abeele et al., 2014), here value is not solely in money savings but social capital (recognition) where one should continuously 'check in' to a service (e.g. gym). In excerpt two, value in a social layer is clearly expressed in LBS enabling users to glean from their network; finding out best places to hang out. Another interesting find was how other members use location services as an electronic diary of events:

> *"…as a kind of geographic, social diary. I have a shoddy memory and Foursquare is a good crutch to help remember when and where I met with someone."* ***(SWB)***

> *"…I used my Google Calendar as a reminder. However, my Foursquare was more accurate…I only share my checkins on Twitter when it is a cinema… after a years' worth of checking in and taking the time to look back."* ***(DS)***

This adds another dimension to the social layer where value is in a digital footprint of LBS related experiences. In the two excerpts, users rely on social LBS as an *'aide memoir'* of people and places visited. It becomes apparent that these are routine activities spanning several years, suggesting a link to e-lifestyle motivated in part by social value.

5.1.7 Consumer Readiness to Respond to LBS

Many online members adopted a cautious response to LBS as outlined in narratives on usage experience. Most of the narratives highlighted trust and privacy issues, in line with Johnson and Spitzmuller, (2008).

> ***"****It is worth taking a moment to consider who you would trust more with your personal data – a major corporation like Telefonica or Google, or yourself, 20 years ago. "Although it's relevance will, as stated, not be appreciated by the young.****" (Th)***

Whilst there are concerns over use of personal data, interestingly, trust issues are highlighted regarding young users (indifference to LBS); parallel to existing literature (Assael, 2005). In contrast, others refer to implications of data misuse for any LBS user:

> ***"****…any collection of location information 'around' where I've been is still a breach of privacy without my consent.****" (A)***
>
> *"All this location based stuff is fantastic in principle but in practice all it will lead to is more breaches of privacy, more spam advertising and just general intrusion on our daily lives. when I walk down the street I don't want an SMS every 5 yards inviting me into the pub, clothes shop, barbers etc…* ***(CN21rm)***

Clearly, some members are dismissive of any LBS that 'harvest' personal data citing concerns over invasion of privacy. Where this is the case, users become suspicious of advertising perceived to be a ploy to tap into users' personal information. There is concern over fraud and spam advertising, with users beware of how their privacy is mediatized. The pleasant surprise is the debate about consumer readiness to receive LBS:

> *"British culture: we are interently more cautious/untrusting than our friends over the other side of the pond… - every new innovation reported in the press is not celebrated but questioned or almost feared… that will take a little longer than the US to get over."* ***(BG)***
>
> *"…but we are far from afraid of trying something new and think we are astute enough to realise if something is working well for others, then there must be something to it."* ***(CD)***

These excerpts have so far expressed mixed sentiments towards location services where some users potentially fear having personal information 'harvested' while others are ready.

> *Even though I disagree with Apples lock-down philosophy, I am also against ANY accumulation of user data for any purpose unless it is stipulated clearly, in writing, and with user control of its transmission* ***(HJ)***
>
> *"At the very least Apple should make this opt-in only."* ***(WC)***
>
> *"…a shop can send out adverts to any device within 50m advertising its promotions (of course, such adverts should be opt-in and blockable)."* ***(SD)***

Clearly, members with privacy concerns seek informed consent as well as opt-in and opt-out options for location tracking; want to maintain privacy control (in line with literature, Xu et al., 2011).

5.1.8 Summary of Phase 1 Findings and Implications

In this section, an outline of how the research questions and objectives for this phase of research were addressed. Thus, phase one sought to ascertain consumer familiarity and attitudes towards location services as well as exploring initial consumer engagement (experience) with location services. In addition, some emerging insights were highlighted (e.g. evidence of brand familiarity). Preliminary findings have indicated how four key themes emerged to describe consumer response to location services (familiarity and engagement, evidence of e-lifestyles, situational context, and expressed benefits of LBS for respondents). Key findings from this phase are shown in Table 5.2. These themes are shown in the Coding Process in Appendix 16 (See Figure 9.2). Insights from this phase helped to inform and develop data collection instrument for phase two- specialist interviews. Key questions to be taken forward include uncovering how emergent contemporary lifestyles influence response; consumer response patterns in actual LBS encounters; and gaining insight into the influence of situational context on consumer response. It is anticipated that the next phase, involving one to one interviews based on scenarios of relevant location based services (for individual consumers) will capture real life consumer experiences of different forms of LBS and bring out the reasoning behind individual responses.

Themes & Sub themes	Example Statements	Evidence of Theme (s) from Respondent Statements	Link to Research Questions
Familiarity and extent of engagement with LBS Use for utilitarian purposes Use for hedonic purposes	*"…basically, most of the time it is just a mobile phone (or as close as I can make it) …."* *(PI)* *"…I personally integrated Foursquare check-ins/tips and Food spotting photos into my app and saw a lot of positive feedback."* *(CR)*	Basic Mobile phone use Integration of LBS (e.g. apps for Foursquare and Food spotting)	**Question 1** What are current consumer attitudes and familiarity towards Location Based Services in the UK?
Evidence of e-lifestyles Multi-way use of mobile devices Routine use of LBS	*""I own an iPod Touch and an Ipad 2 (AC)* *...you could get a pretty good idea of where I've been and also patterns - such as where I work, where I am during the day vs at night…"* *(GS)*	Multiple Device Ownership	**Question 3** What role, if any, do lifestyles and situational context have on individual consumer response to LBS?
Situational Context Mobility in location services Complex use and lifecycle Travel and emergency location based services	*"…you're looking for a restaurant or the closest grocery store (very, very trivial problems - a truck-tire dealer that carries Goodyear fleet traction tires in 19.5…" (BB)* *"…a system in use by Mountain Rescue teams called SARLOC which is used to identify the location of missing people who have a GPS smartphone" (B)*	Situational Context	**Question 3** What role, if any, do lifestyles and situational context have on individual consumer response to LBS?
Expressed benefits &response to LBS Evidence of branding choice Value in Social Layer Cautious LBS response to LBS	*"…the followers of the Church of Jobs, which is exactly how Apple cult fans are behaving, but they don't want to hear it"* *(Z)"…offering me at least a token payment to recognize the value (albeit small) of the service* *(J)*	Brand Knowledge Indifference Location service	**Question 5** Do individual characteristics might link to individual behavioural response towards LBS (e.g. perceptions of value and risk, life stage and family life cycles etc.)?

Table 5.2: Outline of Emerging Themes from Online Observations

5.2 Research Findings: Phase 2

In this section, findings from the specialist interviews using cartoon tests are presented: Section 5.2.1, starts with an outline of the data collection process and emerging themes. Next, Section 5.2.2 reports on actual consumer responses in LBS encounters followed by section 5.2.3 outlining consumer response patterns. In section 5.2.4, findings on consumer motivation, needs and interests predicting response to LBS are presented. This is then followed by section 5.2.5 which reports on value and risk perceptions. Then, Section 5.2.6 reports on the role of situational decision making in consumer response. Next, Section 5.2.7 reports on e-lifestyles influence on consumer response followed by section 5.2.8 which presents findings on individual factors that influence response.

5.2.1 Data collection process and Emerging Themes- Cartoon Tests

Overall, majority of participants showed interest in portrayed scenarios, providing rich insights into real response behaviours (see Appendix 6- Evidence of Coding). Following qualitative content analysis guidelines by Creswell (2014), the researcher read through the transcripts several times for an overview of the findings. Next, annotations were made and then common words identified across all responses. Next, these were grouped together; merging similar words into one key until few representative themes were generated. Resultantly, four key themes emerged from preliminary cartoon tests (scenario) analysis: ***decision making process***, ***response patterns, elements that influence response*** (interest versus indifference to LBS), ***relationship between response patterns*** and ***individual lifestyles*** (see Appendix 6 - Evidence of Coding and Appendix 7 - Coding Illustration). The first and second themes: '*decision making process'* and '*response patterns'* focus on how participants actually responded when exposed to LBS. These themes provide a narrative of the decision-making process (path) and response patterns in typical real-time LBS encounters. Thirdly, '*elements influencing' response* centre on LBS acceptance determinants, thus looking at for example situational context (time or place when offer is received) and relative value of offers. The last one is '*relationship between response patterns and individual lifestyle'.* This theme explores how lifestyles mould individual consumer response to LBS. The four themes are considered in turn starting with the decision-making process.

5.2.2 Actual consumer response Process for LBS

Most participants identified similar decision processes when exposed to LBS stimuli (consumer response process for food and clothing LBS). As such three key stages were identified which are '*exposure', 'checking'* and '*response'* Two key decision-making processes for LBS are highlighted; in the first stage (exposure) the customer receives a message which they can either read as it appears on the screen or ignore. As expected with relatively new services, some (few) participants were indifferent to scenarios from the onset and chose to ignore messages:

> *"No response as there are several stages to the likelihood of eventually being the lucky winner."* [R3FCTM -IGNOREOFF]
>
> *"Delete the text without opening link"* [R13CTM -DELET]

Here respondents are uninterested in offers mainly related to recreation (e.g. Carnival and Football club event) and to a lesser extent food. In the first excerpt, there is suspicion over offers linked to draws. Thus, the decision-making process for this group ends at the exposure stage without even interacting with services.

In contrast, majority of participants' go beyond the 'Exposure stage': proceeding to the 'Checking' (stage TWO) to browse the offer as illustrated:

> *"It's a remind that I should get some new clothing. I should go in and check if the discounted clothing fits me well*. [R7CTM -CHECKO]
>
> **"***Oh let me go and have a look at the shop to see if there are somethings I want to buy."* [R17CTM -CHECKO]
>
> *"She would have a look at the content of the voucher if it is money off discount she would carry on walking and plan to come another time."* [R2F0CTM -CHECKO]
>
> *"I WOULD GO INTO THE SHOP & LOOK AT THE MEALS AVAILABLE UNDER OFFER…"* [R4CTM -CHECKO]
>
> *"Find out if the offer is available for London trains on site & make a decision."* [R11CTM -CHECKO]
>
> *"Clicking the link to find out more about the event."* [R15CTM -CHECKO]

Surprisingly, some participants were very receptive and appreciative to these services across varied purchase categories. In excerpt one, participant sees the location message instead as a shopping reminder. This prompts a visit to the shop to check for suitable sizes. Interestingly, checking offers took various dimensions from checking for suitable sizes, available meals, or

voucher content. A key finding of interest was the considerable lack of conviction in offers. For example, some participants (e.g. **R2F0CTM**) reach stage two of decision making (checking), and remain unconvinced by the discount offered. Here the participant projects the view that money off vouchers might not generate an immediate response. When looking at the fifth excerpt (**R15CTM**) however, some participants may find some of the offers overwhelming (e.g. 30% off a return ticket on a 'pricy' London route). Complex decision making is also evident:

> *"She would look online first for the clothes on offer & enter the store, based on what clothes she's found interesting."* [R11CTM -CHECKO]

Here the participant visits the online store to validate value of the offer. Clearly, some participants are more discerning, experienced and will not take an offer at face value. In addition, this may point to new decision-making paths and unique consumer response behaviour (showrooming) where customers conduct price comparisons before making firm purchase decisions. This adds another dimension to checking location based offers.

Thus, when considering overall response when consumers progress from exposure stage, there are variations in decision making process. This process occurs threefold: checking offers; assessing value and making enquiries. Clearly there are variations in the decision path taken by participants; some check offers and move on to assess value while yet others move on to make enquiries depending on the type of location offer. Despite the varied decision-making paths, this section has highlighted how majority of respondents have experience with location services depicted in the scenarios: moving beyond exposure to checking stage.

5.2.3 Individual Response Patterns to LBS

This section explores individual response patterns in actual LBS encounters. As stated in previous sections, most respondents moved beyond exposure and checking stages: progressing to the response stage. As such five key response patterns emerged: ***deleting messages***, ***immediate use of voucher***, ***forwarding offer message***, ***future solo purchase*** and ***future purchase with friends***. For analysis purposes, response patterns were classified threefold: immediate use, delayed/future response and collective social action (social influence). Clearly participants who progress from the *'Checking'* to the *'Response'* stages exhibit varied response patterns:

> **"***Jane might look at the text and delete it."* [R2FCTM -DELET]

"*Delete – How many people have signed up to this and what are the chances of actually winning."* [R18MCTM -DELET]

Despite interacting with the message, some participants' initial interest does not translate into action. For example, the participant in the first excerpt (**R2FCTM**) had to first read this message possibly moving on to evaluation before deciding to delete (potentially highlighting the role of automatic exposure for someone with a smartphone/device). This decision is corroborated by the second participant (**R18MCTM**); deletes message having subconsciously/consciously weighed up chances of winning. Thus, moving to the second stage does not always translate into positive response.

Others made instant use of vouchers, thus voucher is redeemed instantly by visiting respective retailers depicted in the scenarios:

"*I should go definitely go in and check the offer otherwise I will not be able to come back this week and the voucher is expiring in a week."* [R7CTM -IMMUSE]

"*He would definitely take up the offer as it is cheaper than the normal price*" [R10CTM -IMMUSE]

"*She would buy a meal deal, as limited time offer, and the café is close by meaning not for to travel and it males easier decision for lunch when offers given when walking past.* [R9CTM -IMMUSE]

"*Stop and download the app since it's a one off chance"* [R14CTM -IMMUSE]

As expected, most participants respond immediately to offers valid for a short period (e.g. valid for a day or week) as opposed to a month. This is evident in excerpt one where a shorter time frame creates urgency in response. In excerpt two however, urgency in response is affected by immediate (scale) price savings to be made. Put differently, other participants consider multiple factors even where immediate response is required. Evident in excerpt two, apart from a limited time within which to respond, the timing of the offer (lunchtime) and proximity to store (situational context) also play a significant factor in decision making. Thus, decision making process at the response stage is more involving and complex as deeper thought is given to benefits of offers beyond monetary value. In addition, when looking at immediate response patterns, this cuts across various buying categories (e.g. food, recreation and clothing).

Another interesting find was how initial exposure to offers resulted in future behavioural intention. As illustrated:

"John go into the shop to view the selection on offer and work out how much he is going to save. He can the buy what he can and return before the month ends to make more purchases." [R13CTM -IMMUSE]

"Go in the H&M shop and buy the clothes she needs for going out. Might buy more expensive clothes as she would have received a 25% off voucher. Bargain!!!" [R3CTF -IMMUSE]

"Same as previous response. During that month he's more likely to think of Costa Coffee as his first choice when he wants coffee.". [R1CTM -IMMUSE]

Some participants in the selected quotes are inclined to either take advantage of the same offer before it expires (revisit shop) subject to scale of savings made (e.g. **R13CTM**) in both short and long-term contexts. Secondly, others expressed willingness to make additional purchases of more expensive in-store items because of the LBS offer. In the third excerpt, exposure to LBS offers result in brand familiarity: Costa coffee is included in the evoked set and becomes a preferred brand in the future.

Nonetheless, other participants faced with both short and long term offers postponed purchases to a later date or time as illustrated:

"*She rush at that time will not buy the clothes because the discount is for a month, she can check it in online store or other clothes brand, than decide when she will buy the clothes."* [R19CTM -DELRES]

"Take note of the offer and potentially return with a few colleagues to enjoy a coffee or meal." [R16CTM -DELRES]

*""**"**Errr. Well, maybe keep it for later Maybe ask XXX (best friend) if they would like to come together."* [R17CTF-DELRES]

*"She would quickly enter COSTA Coffee shop look through the menu, buy an item and when she arrives the university, she would tell all her friends about the offer at COSTA maybe even go back there together.***"**" [R5CTF -DELRES]

When it comes to food and clothing related LBS offers, most participants are more discerning and selective, scrutinising the value (comparing prices) before deciding to make a firm response. For example, participant ***R19CTF*** delays response given the long-term validity of the offer (month). As such there is time to compare offer with online prices as well as other brands. Others place value in collective social actions: delaying response (i.e. purchase), and returning later with friends to take advantage of the offer. There seems therefore to be a unique pattern of collective social action (inviting friends- e.g. **R19CTF** and **R16CTM**) across food and clothing product scenarios. Somewhat surprising, collective social action does not apply

to travel related offers (e.g. 30% off train deals) as well as recreational activities such as Carnival and celebrity encounters (e.g. meeting Leicester City football stars).

5.2.4 Consumer interests, e-lifestyles and individual motivations predicting consumer response

Responses to depicted scenarios echoed individual lifestyles as demonstrated below:

> *"One would assume that she would have looked at forums before travelling, would have the hotel + she's arrived so would have her flights."* [R20CTF-EEL]
>
> *"As the smartphone has an internet connection, why not open the link and check what's special about the festival. After all, it's only a click away. We may be surprised.* [R7CTM-EEL]

Customer here appreciated the role of technology in reducing search costs and coordinating activities. In excerpt one; participant highlights value in connectivity when using smartphones. In the second excerpt, visiting forums before a holiday could imply something that is done routinely when similar decisions are made. Participant exposure to location offers may result in similar response patterns in the future linked to individual lifestyles:

> *"Same as previous response. During that month he's more likely to think of Costa Coffee as his first choice when he wants coffee."* [R1CTM -EEL]

There appears to be a predisposition to respond in a similar way when faced with similar mobile based offers as depicted in the scenarios. Thus, respondents with experience in location services appear likely to display similar behavioural responses (routine purchase) in future LBS encounters. Therefore, distinct lifestyle patterns can define LBS use.

Findings (see Table 5.3 Cartoon tests) also point to how some participants are motivated by desire to earn social acceptance when choosing LBS as illustrated:

> "*Yeh! Sign! I want to meet the heros!"* [R17CTF -MOTSS]
>
> *"Leicester being a prominent team since winning premier league, most people whether football fan or not want to meet. So will sign up and download app, as winning will mean they can brag about meeting them."* [R9CTF -MOTSS]

Thus, location services enabling customers to gain social links (e.g. reference groups such as celebrities) by connecting with familiar brands may result in positive behavioural response. LBS echoes individual interests and needs, as illustrated in the following quotes:

> *"Depending on the interest of the customer, they might click on the link to see more details on the carnivore and see what it has to offer and where they fit in, maybe look-*

up the dates to see if they could attend and see activities that interest them" [R5CTF -INTNEEDS]

"She will landed the trainline app to buy the tickets, because it is the most needed required." [R19CTF -INTNEEDS]

Thus, interest in food, and activities (recreation and travel related LBS) influence participant response. Here familiarity and popularity of the brand influenced response:

"*Forget everything else, this Leicester City Football Team who are an inspiration and making headlines right now. She is likely to jump for the opportunity. Even people that don't like football, the Leicester Story is unique and people are more likely to respond positively "* [R1CTM -BRANF]

Brand familiarity may influence response if the brand is a favourite choice and LBS may be disregarded:

"She would carry on walking as Costa isn't really Janes' usual coffee shop. She prefers Starbucks." [R2F0CTF -LOIDEBRA]

Participants might not respond favourably (e.g. purchase or check offer) to unfamiliar scenarios (e.g. **R2F0CTF**) but familiar brands received almost immediate response as demonstrated by **R18CTM,** who says "DROP EVERYTHING -OFF TO NANDO'S…." [R18MCTM -BRANF]. The capital letters emphasizes how brand popularity has an impact on LBS response.

5.2.5 Value and perceived risk influencing response patterns

Another key insight to emerge was how consumers are more discerning; carefully considering value of offers before responding: responding favourably where there are considerable time and money savings. As illustrated:

"She would carry on walking to university as she still has a month and 10% isn't really enticing" [R4MCTM -LOV]

"I WOULD INSTANTLY USE THE VOUCHER BECAUSE TRAIN TICKETS TO LONDON ARE TOO COSTLY, SO A 30% DISCOUNT WOULD REALLY REDUCE MY OVERAALL TRAIN FAIR." [R2F0CTF -VAL]

"He would go into the shop and check out the deal. He might not be rushed into buying it unless it is really worth it." [R10CTM -VAL]

Value influences response to food, clothing and travel scenarios (buying situations). Not all participants expressed interest in depicted scenarios; indifference can occur by perceived lack of value as well as a lack of identification with brands. As expected with novel services such as LBS, individual concerns over privacy were expressed:

> *"Also he might wonder how H&M managed to send to send him a message… If there is no interest in Carnival stuff they are more likely to go on a rant about invasion of privacy and why they are being sent that message."* [RICTM -INDCOPRIV]

> **"***SPAM – DELETE. - This is the kind of thing I expect to receive in my emails not text. Just don't have time to look into it and research it."* [R18CTM -INDCOPRIV]

Thus, for LBS to be accepted, there might be need to seek permission as well as deliver tailored content otherwise consumers become indifferent. Nonetheless, only a few participants expressed these concerns. Surprisingly, such concerns were not expressed for significant money off deals such as 30 % off trains or 25% off food. Thus, individual concerns over privacy are mainly echoed where non-monetary offers (e.g. Carnival and Leicester City celebrity event) and relatively low discounts (e.g. 10%-25% offers) are offered.

5.2.6 Situational Context Influencing Consumer Response

Reinforcing the findings in the observations, location and situational context appear important to participant response patterns, as illustrated by R3FCTF:

> *"If they are on their own – might not use the offer as it might be more expensive than just getting a single meal. If with company, one might as well take advantage as they are already at Nando's and is likely to be one of the first customers."* [SITCO]

Here social influence evidently influences response where the offer is ideal for a group rather than a single person. Timing and specific locations when offer is received potentially influence individual response:

> *"She would purchase tickets for London, as means She can get a good price on good time trains into London, as She was there already to buy train tickets."* [R9CTF -SITCO]

> *"She may go into the store as walking by, if she has time and needs something specifically…I think she would be very pleased and think it was very good timing, should she be requiring a return ticket for an upcoming journey…"* [R6CTF -SITCO]

Thus, elements influencing response at a situational level context include timing of offers (i.e. offer received when customer is actively searching related product or services); who is using the offer (individual or group purchase vis-à-vis nature of offer e.g. family benefit or single benefit- meal); and the location/place (e.g. offer received when one is nearby).

5.2.7 Person-specific factors influencing response

Respondents were asked to indicate their gender when completing the scenarios hence this section seeks to explore if gender was influential in individual consumer response to LBS. When looking at scenario findings, (see Table 5.3), there are no real gender differences in response patterns in clothing, food and travel.

Table 5.3: Summary of Scenario Responses

LBS Activities									
Sequence	**Gender**	**Behavioural Response**	**H&M**	**Costa Coffee**	**Nando's**	**Carnival**	**LCFC**	**Train**	**Holiday**
1	**Male**	Interest	9	8	9	5	4	9	9
		Indifference	0	1	0	4	5	0	0
2	**Female**	Interest	10	9	11	6	7	10	11
		Indifference	1	2	0	5	4	1	0
		Total	20	20	20	20	20	20	20

There are generally positive attitudes towards most LBS categories by both male and female participants. Nonetheless minor gender differences were observed in individual responses to brand experience (LCFC) and carnival scenarios as shown in Table 5.3. Thus, for both genders, there is marginal interest in Carnival and LCFC scenarios where there is no monetary benefit (e.g. discount voucher or coupon) attached. Overall, both males and females were positive towards food and clothing LBS stimuli.

5.3 In-depth-interview Findings

This phase sought to establish actual consumer responses in LBS encounters: consumer response process, role of e-lifestyles and situational context in shaping LBS response patterns. Results are organised in three areas: discerning consumers (e-lifestyle footprints and individual response, e-Values that trigger positive response, e-Activities triggering negative behavioural response), contextual factors (situational decision making in LBS use) and variations in individual responses. As previously stated in the review of literature and contextual chapters,

e-lifestyles themes stated above (e.g. e-Values and e-Activities) were informed by Yu (2011) adapted e-lifestyle scales.

5.3.1 Discerning consumers and e-lifestyles

This section discusses how consumers are more discerning seeking routine *'on the go'* access to location oriented activities to satisfy various internet mediated interests. In addition, the influence of consumer e-values (basic beliefs), e-opinions and how these define digital footprints (e-lifestyles) in LBS encounters is explored. Thus, objective three and research question three are answered in this section.

Research Question 3 - What role, if any, do lifestyles and situational context have on individual consumer response to LBS?

5.3.1.1 Impact of E-lifestyles

Most respondents expressed how technology enabled services (mobile phone and apps) have become the default means for conducting daily activities. Thus, positive attitudes towards location services convenient for completing day to day tasks were evident:

> *"Cause I, well pretty much every day, especially when you are going to new areas but if it's your normal root to work or from home to Uni then it's a bit different cause you know you are familiar with the root. But then when you are going to a new place obviously you have to put in the satnav... or if hear someone say have you heard of this place called so and so you just quickly put it on the navigation [navigation] so sometimes it's easy to see where it is exactly...yeah ahh I've used the Google maps, Play store app [Play store app yes] ahh used do-o do -o do-o, ahh yeah I've got also like a Sky sports app." [*R1M-*EEL]*

Here, routine (everyday) LBS use (e.g. apps) in search and navigation contexts (distant places) provides convenience especially in unfamiliar places. Interestingly users are no longer relying on traditional means of search and navigation (e.g. paper maps-A to Z maps) akin to traditional activities. In addition, this excerpt shows evidence of high level engagement with location services using various apps cutting across different activities and interests such as communication and entertainment. Put differently, other respondents indicate how routine use of LBS (e.g. navigation and Uber apps) even in familiar places reduces search costs:

> *"Ahh, ahh umm, I use it regularly [sometimes] yeah if I'm going somewhere to a place that I don't really know or familiar with or even in Leicester [even Leicester] yeah I use it [Respondent laughs] I use it to get around because there are certain places where*

*you don't need, where you're not familiar with, so you need a way to get around. I use it so yeah just on a regular basis." [*R2F -*EEL]*

*"It's around Leicester, outside Leicester everywhere… Yes, and it tells you if the next Uber is six minutes away, three minutes away or ten minutes away or if there is no Uber around you, near you have to wait, so it loads until there is one close by within certain proximity that's when it will tell you…a lot [laughs] maybe like over ten times sin a week [In a week, ok] depending on how my week has been most of the times on average like between five to ten times." [*R5FF -*EEL]*

An interesting find is how some respondents actively use LBS in both familiar and unfamiliar places to navigate as well as access taxis (e.g. Uber). Here, apps leverage GPS coordinates to locate the consumer providing real time information on taxi availability. One respondent (R5F) specifically refers to routine use of navigation up to five times a week: becomes a way of life (e-lifestyle). In addition, the mobile phone has become an important conduit for accessing and paying for *'on the go'* location services as noted:

"You can't just find Uber on the road and enter…. you have to book in advance and you have to use your phone. Mainly that's how; your phone is used to charge. They charge you on your phone. Your phone is connected to your bank card. The application is connected to your bank card. So you don't pay them by cash, you pay them by phone, so, automatically the only way they access is by using this." R5F-*[EEL]*

When we think of traditional lifestyle scales (e.g. AIO and VALS), we see how that traditional scale batteries may not fully capture technology centred contemporary activities and interests. More so, use of location services in both familiar and unfamiliar environments point to new ways of completing activities by discerning customers: engaging with location content and services in *'mobile environments'*. Apart from travel related LBS; evidence of e-lifestyles was also shown in how some respondents routinely responded to food related LBS. For example, some respondents stated how they regularly receive alerts for O2 coupons (O2 priority) based on their location:

*"Oh yes I do receive some coupons from, I am on O2 as well. They are called priority moments [Ok,], so eh, I do get some vouchers on there… I normally look on Monday between like 10 am to 3 pm [Ok] you can get umm, lunch for a pound from like Boots or WHS Smith so I know they are always there." [*R3F-*EEL]*

"Umm, the, the ones I usually, the ones I usually receive are actually my, we call it O2 priority which are from O2 [O2, ok-mobile network operator] an example is on Mondays O2 does a £1 deal for aah lunches so that usually is just specifically for lunches [Ok] and you have to get a promotional code for O2 priority themselves on Monday and then go present it to WHS Smith and then that's when you can get the

*discount... What you normally do is that you actually, actually have to go to O2 priority, priorities apps themselves which is actually what we actually get with our O2 phones and once you go to priorities you have to select to use the promotions then and there and then it gives you a two-minute window for you to use this code and then you just have to go present the code to WHS Smith cashiers." [*R4M-*EEL]*

Findings indicate how respondents who subscribe to specific mobile networks, receive and use mobile based lunch time offers: responding to these has become a norm (e.g. every Monday afternoon). In the above excerpts, both respondents demonstrate positive behavioural intention to respond to food related location services. The first excerpt (respondent 3) reiterates regular use of network vouchers sent by mobile operator O2. Therefore, members who regularly receive location based food offers have positive behavioural response attitudes.

For yet other respondents, LBS use has become ingrained in daily activities via entertainment; gaming and communication where individuals can interact with other users (e.g. Pokemon Go players) as well as checking where they have been in the past (e.g. Timehop):

*"Ok, you could look at my battery [laughs] aah, umm Pokemon Go is top [Yes] currently umm, and then my next highest is WhatsApp, you see I never used to use it that often. I just often used text because I have free text messages so it makes sense. Well most of the people they prefer to use WhatsApp so I accustomed to everybody else…Eh, Pokemon normal week day will be about at least at least three or four times [three or four times] yeah, on a single occasion [Ok]. Timehop is once a day everyday [Yes, okay] Yeah, Snapchat, a few times a day. WhatsApp a couple of times a day [laughs]." [*R6F-*EEL]*

Findings suggest some respondents use location services for hedonic purposes (playing games), on a regular basis such as using location enabled games (e.g. Pokémon). When thinking of communication with friends, others specifically indicated how communication is now *'wired'* using social networking apps (e.g. Facebook). Here respondents routinely log daily activities, updating friends on what they are doing in real time and communicate this to their friends who can access the information in real time via Facebook:

*"You know, and I also the Facebook a lot [Yes] to check on the update, updates from my friends to see where they go travelling, what they are eating, you know what they are wearing, you know this kind of thing is like getting into others life because you regard them as friends and you want to know them more [Yes]. So next time in a way, you communicate you have a dialogues with each other. You will just know what to say, what to talk about." [*R7M-*EEL]*

Here it appears maintaining regular updates online has become a way to bridge the distance between physical locations and time: access to real time social content. One interesting find was how some respondents use multiple devices to coordinate exacting daily tasks:

> "*So the Samsung Galaxy phone is for work. So I mainly look at my emails on the go, any calls that I need to make. Internationally or here in the UK, I use that. I also use the SMS messenger WhatsApp on that same handset. I also use navigation when I am on business. And that's the phone I rely on to make business calls. Umm my iPhone is a personal phone. I do check emails on that. I do use it as a satnav here and there. Calls, text but during the work because I'm during the day I tend to use my work phone. I rarely check the internet on my phone at work. I use my laptop. [*R16M-*EEL]*

Results point to multiway use of devices (*'screen mirroring'*) for personal and business purposes. Interestingly, **R16M** uses two different phone brands as well as a laptop for day to day activities. In summarising this section, respondents have become more discerning seeking location services and apps meshing with e-lifestyles. Examples of location services accessed include communication (calls, emails, texts and social media), navigation (familiar and unfamiliar settings), entertainment (e.g. gaming) and shopping.

5.3.1.2 Evidence of E-lifestyle footprints and Individual response

A few respondents identified how use of location based services complement lifestyles for example routine work-related tasks. Thus, this section presents participant narratives highlighting how using location services has become routine in executing daily/routine tasks. Therefore, when asked about individual LBS use, participants stated that:

> *"I'm always on the road [laughs]. Yeah, yeah coz I, email work, personal yeah…And umm, at least I plan. I'm able to plan my day and not have to maybe make time to then stop and go to the bank. I do everything online and travelling I don't have to stop and look at a map. Otherwise I'll get lost [laughs]." [*R12F-*EELF]*

> *"It will show restaurants, and petrol station because I always search these on Google maps especially petrol stations. Ye*ah, *I'm always on the road. Ok, with my job it's every day. Courier service especially fuel because I always search for that, so the phone now knows that I search for that… it normally updates me if there is an accident on the motorway because of the internet it notifies m to change the route because there is an issue." [*R14M-*EEF]*

Thus, positive behavioural responses where LBS support individual lifestyles are influenced by previous travel routines. Other respondents specifically referred to LBS received when frequently using trains.

*"Normally I receive the offers at home, aah because I was aah, I was quite used to trains frequently so aah not knowing how they work it, but I'd normally receive mine at home." [*R3F-*EEF]*

Therefore, well informed respondents who travelled frequently are apt to respond positively to relevant travel based services. In addition, older working participants who regularly travel were open to travel related LBS that supported work lifestyles.

Findings in this section indicated how *'on the go'* individuals *('transumers')* tend to rely more on LBS to support e-lifestyles. For example, mobile banking *'on the go'* (see Caddy, 2016), work related communication as well as travel updates. There is also strong reliance ("*I do everything online*") on location services to execute daily tasks as well as navigation thereby resulting in unique e-lifestyle footprints. Clearly, mobile devices have become pivotal centres for coordinating daily activities. Furthermore, many respondents narrated how that nearly all their activities are managed through an electronic device.

5.3.1.3 E-Values that trigger positive response and role of Brand Familiarity

Many respondents expressed positive attitudes towards LBS, accessed *'on the go'* citing myriad benefits. For example, the ability to monitor health and wellbeing as noted:

*"Navigation yeah I do use it for navigation purposes. … Fitness tracker! Yeah, yeah, I do like my apps." [*R20F-*EV]*

Findings indicate how respondents now use mobile devices to not only navigate but also for health and well-being (fitness) in between places: use of an app (type of LBS) for *'tracking'* in places of commute. There appears to be routine use of an app (Fitness tracker) which could potentially be *'on the go'* (exercising). Thus, sense of accomplishment where apps provide real time updates (information) on exercise for individuals following a healthy lifestyle. For yet others, there is value in apps meshing with individual lifestyles:

*"Yeah, yeah. I've actually used Yelp yesterday, Evernote pretty much. There is obviously editing. You know photo editing, yeah I use them pretty much every day You know whenever I take a picture. Aah, Instagram, Facebook, Messenger, Whatsapp…sometimes when you on the move just chilling and also music apps…." [*R1M-*EV]*

Here there is value in apps complementing individual ways of living, providing convenient access to *'on the go'* services in places of transit as well as between times. Similarly, other respondents see value in information sharing apps:

> *"Aah, aah not that not that aah my life is dependent online but it's just you know it always makes things a bit easier. In terms of mainly information [information, Ok] yeah it's just even aah e-e in terms of information and also to share things which is information, I get information or to share a picture. It just makes it easier." [*R1M -*EV]*

Thus, individuals spending more time online find value (convenience) in apps ('*one clicks'*), access to information as well as sharing pictures with friends. Apart from social and communicative value, others sought money off deals:

> *"…it will come up on the side and it will be showing all the latest offers [Ok] for clothes so they have a smart way of thinking. Sometimes I just, sometimes when I see good offers I do."* [R2F -EV]

Other respondents expressed how free communication apps have become the default means for making cheaper calls. This is illustrated below:

> ***"****Aah, well yeah the reason I got to use them is because they are important in my lifestyle, umm, I've got to communicate with my family for example my family was abroad aah the other week so it was easier and cheaper to communicate by WhatsApp or Viber , I can also like for example my husband doesn't have Viber he's got Android so I use maybe Viber to make a call [Ok, to make a call], and then the 'Sales force' I need to check my shifts to make sure you know they have put me where I need to be working for the following weeks or months….* I have used like travel deals and sometimes I just look at them to see where they are*…" [*R3F -*EV]*

Interestingly, value in free calls extends across both social and work purposes, here respondents use WhatsApp and Viber apps for communicating with family whilst the Sales Force app is used for checking working rotas. In addition, respondents' demonstrated prior experience with travel related deals for familiar holiday destinations (e.g. Disney). Thus, indicative of the potential mediating role of brand familiarity when considering travel related LBS deals:

> *"I think peoples' responses you know will be really, really different you know, in terms of brand* ***[Ok]*** *because branding you know is a really big thing you know, from the perspective of the retailer* ***[Ok]*** *and also for consumers* ***[Yes]*** *in a way." [*R7M -*EVBF]*

Potentially, respondents see value in familiar brands where prior experience provides a point of reference in terms of value (brand added value: perceived performance and psychosocial

meaning- experience world around the brand). As expected, some respondents saw value in emergency LBS.

> *"My car broke down and the service that was to come recover my vehicle they had this app and they asked me to send that to them. Which then they could locate me quickly or what not. But I think it was just a scheme to get my number and." [*R16M-*EV]*

Nonetheless, others were quite selective (brand conscious/familiarity) when it comes to food related LBS deals as indicated:

> *"Very particular and I like my food, so I'd rather go somewhere. I'd be enticed to go somewhere I'm familiar with than where I'm not for an offer or location based services…Yeah Pizza Express do it, ahh Zizis' when I walk past, you need to sign in, you need to create an account yeah. I don't like Dominos, it's too soggy so I'm never enticed by them." [*R20F -*EEL]*

Thus, brand familiarity and experience with LBS is key to decision making and behavioural intention in encounters with LBS offers for leading fast food and restaurant brands.

This section demonstrated how e-values trigger individual behavioural response to location services: role of deals (offers) or convenience in individual response patterns. Thus, respondents are likely to respond to location messages related to navigation; communication (social and work); food and travel. Secondly, there are likely to be positive behavioural responses where apps mesh with individual lifestyles. Thirdly, respondents are prone to respond to LBS from familiar brands hence the importance of brand familiarity in shaping e-values. Lastly, and as expected there is positive behavioural response to emergency LBS albeit lack of trust where personal information is collected. Furthermore, it has emerged how situational decision-making influences individual response to location based services. Thus, the role of location, timing and relevance, nature and value of offers trigger positive behavioural response to LBS. In contrast, some respondents were indifferent to irrelevant and ill-timed LBS stimuli.

5.3.1.4 E-Activities and e-Interests triggering response

When looking at e-lifestyles, we can observe how specific e-activities may trigger individual behavioural responses to LBS stimuli. For example:

> *"Aah, I use aah Google maps…Mostly for navigation. And sometimes I, because on Google they've got that voice command say if I just press the voice command. If I just say take me to Leicester or take me to Derby. Then it starts mapping it out then it*

calculates it. Then it turns into location then, because another thing is the reason I'm not getting adverts; location based adverts. Because most of the times I don't have my locations, aah my locations on. So if I turn it on, then err it gives more benefits and in terms of when I take a picture, it tells me where that picture was taken and but then it eats the battery so like to turn it off and then turn it off when I need it." [R18M -EAI]

Results highlight selectivity in LBS use (e.g. navigation and picture diary/timeline) thus trade-off between accessing location services such as navigation and turning off devices at other times. Other members cited how LBS enable search and booking for vacations, for example:

*"Yeah I use AirBnB, Yeah, to find a place to live in the travel. I go to Paris and I go to Paris and I go to AirBnB to find a house." [*R19F-*EAI]*

Thus, where members routinely travel on vacation, booking apps for accommodation (e.g. hotels) may generate positive response:

"Aah TripAdvisor because *you're trying to search. A restaurant or something but just can't get somewhere where you feel nice. Then I will use trip advisor to help me find out good although sometimes it doesn't really help me. You know you can heavily rely on something you trust but they give you extra information."* [R17F-EAI]

Here respondents find convenience in aggregated apps providing access to a plethora of services from restaurants to recommended places of interest. Nonetheless, there seems to be reservations where irrelevant (less useful/generic) LBS recommendations are received. There is also evidence of how e-activities and e-interests influence response:

"Well, Snapchat, you can take photos and you can share videos. It's normally current so for example I am at, I am on holiday right now and I'll just take a picture of where I am around me. You make a small caption and it only last a short time, 24 hours. After that it disappears, so my friends will view it within 24 hours and it disappears." [R5F-EAI]

Clearly social layer influences responses here where social networking apps (e.g. snapchat) assist in maintaining links with friends when abroad. Here location enabled apps support consumer activities and hobbies providing real-time access to social activities. For yet others, interest is in location services meshing with hobbies as indicated:

"They'll just pop up with the age coz aah, one of the regular activity I do for my evening time, is I use my mobile to read recent novels. And then Google Play, Google advertising, advertise will just come with that novel advertisement…. and the brand name I search, it will link*."* [R17F -EAI]

Other respondents indicated how use of apps is linked to networking (work related) and entertainment purposes *'on the go'*:

> *"Yeah, I have to go to LinkedIn, I have to go to WhatsApp to see my messages; I need to play game while I'm go on bus on my way home and so on… I have heard of it but I've not really used it but I have 'checked-in' before when I have travelled like last year. Using a mobile app, I think it was Trivago or something like that"* [R11F -EAI]

Interestingly, there is a mixture of social and work-related e-activities via apps as well as use for hedonic purposes. In addition, the respondent narrates how they have 'checked in' when travelling using mobile apps.

Respondents also used e-activities that tie in with health and media related interests as stated:

> *"I have apps for my banking; my credit card, obviously for trip advisor. Then I have got a fitness app, I've got all my social medias and obviously my TV [TV?], TV and I have BBC and Netflix and More 4."* [R9F -EAI]

The narrative shows widespread use of LBS to coordinate daily activities which in this case are electronically mediated. Respondents provide examples of how such use has become the norm with e-activities ranging from banking, holiday, fitness (health and well-being) as well as entertainment. When we look at these activities, we can see how location services (e.g. apps) have become the default means for managing and executing day to day tasks. On a lighter note, some respondents expressed how they routinely 'tagged' stuff such as selfie pictures as noted:

> *"I love my little selfies, my friends even call me queen of selfies, I take a lot of selfies."* [R5F -EAI]

An interesting find here where some respondents boast of e-activities (taking photos) of almost anything: making an announcement of where they are as well as what they are doing.

This section has highlighted how routine internet mediated activities and interests such as navigation, travel (e.g. *'checking in' to* hotels), banking and fitness are used by individuals to coordinate daily activities conveniently.

5.3.2 Contextual factors

This section considers how respondents' behavioural response patterns differ based on where they are (location), when (timing) as well as who with (social influence) when message is received. This is herein referred to as situational decision making and the various contexts are

considered next. Thus, the section addresses part of objective three and research question three seeking to establish the role situational context in consumer response.

Research Question 3 - What role, if any, do lifestyles and situational context have on individual consumer response to LBS?

5.3.2.1 Situational Decision making in LBS use

Behavioural intention (response) towards LBS was shaped by situational context, as illustrated in the next excerpt:

> "*It's quite interesting actually because sometimes I didn't use GPS on the phone [Ok] and I just pass through the Dominos store and I get the text. Aah, probably l-last month I think because normally my friend he work as the delivery man [Ok] sometimes he want me to be the co-pilot, [Ok] coz it's quite easy last month so when he drive past Dominos he, the one behind De Montfort I got that text…. Actually it's quite good the service they provide for their customers because umm sometime it can encourage to buy food from them." [*R8F -*SITCO]*

Three situational decision-making contexts are evident here; LBS received when passing through a fast food retail location, in the company of friends and prior registration with vendor. Not surprising therefore, this respondent has positive attitudes towards receiving and responding to LBS stimuli *'on the move'*. Similarly, others indicated how because of wired lifestyles they are likely to search for LBS when on the move as noted:

> *"Ooh, if I'm on the move say I am in a restaurant and someone has gone to the toilet I will have a quick 'nose' coz you are set on your own ain't you [Yeah] aah, but I was to get a text then from H&M or Selfridges when I am walking by, I would go in… I must say with TripAdvisor if I do use their map on the board, they will sometimes send me notification in the morning 'popping up' saying have you used this restaurant and this restaurant it's near you and stuff [Yes, yeah] and I think it is near me at the moment. If I am there I might as well, but I try and choose what I fancy. If it does pop up in the morning. If it pops up in the afternoon I will be like oh well, we'll go in."* [R9F -SITCO]

There is clearly an indication of how some respondents actively search nearby location services *'to kill time'* (between times) when out with friends. Some positive behavioural response was cited when an LBS offer for clothes is received as the person is walking by. Here, respondents appear more fashion-conscious relating to specific brands that mesh with individual interests: situational decision making on the move is rather complex (interests that are time, place and

brand dependent). In addition, receiving these services at specific times may trigger positive response such as getting a restaurant offer in the afternoon as opposed to morning.

Respondents noted that they were generally receptive towards any type of offer:

> *"Yeah, ok I mean if it's something like of course who wouldn't like an offer? For example, I 'm buying something; why should I buy something for £100 if I can get it for 40, for 40 pounds of course but it also depends with the time the particular offer is coming. Sometimes the offer is coming maybe you are completely broke but you just aah, wipe it out to the side. But if it comes at a time when you have money intending to shop for that particular items of course you will shop for the offer."* [R5F -VAL]

Positive behavioural intentions were noted for relevant location offers arriving at a time of need when funds are available. Conversely, for irrelevant or ill-timed LBS, some negative behavioural intentions were expressed:

> *"I could get something on the phone suggesting maybe I'll buy something from a certain shop. On the train station I think. Yes, I did, sort of like ignored it because it wasn't relevant for me at that time." [*R15M -*IGNOREOFF]*

Thus, respondents demonstrated how response to LBS is contextually influenced, with positive response to location messages received when passing through familiar retailers; when in the company of family or friends; and when prior registration has been made. Offers of significant value are poised to receive positive behavioural response, even if less situation-specific.

5.3.3 Response patterns in real -time LBS encounters-

Research Question 4 - How do consumers respond in typical LBS encounters?

One of the key questions and objective of phase two was to establish consumer response patterns (response process) in typical LBS encounters. All respondents were exposed to LBS scenarios (exposure stage). As expected, three varied outcomes emerged: some respondents were indifferent to offers hence expressed how they would ignore or delete recreation location services. Nonetheless, others proceeded to check offers, here consumers were discerning and selective (assessing value and making enquiries about offers). Thus, different decision paths of respondents experienced with LBS was evident in how well they related to select scenarios.

Four customer response patterns emerged: immediate response, social influence (collective social action) delayed response and indifference. There is complex decision making in LBS encounters depending on the nature of the LBS (e.g. duration of offer and type): LBS with a

relatively shorter life prone to receive immediate response than post-dated ones (delayed response). In addition, results highlighted how some respondents shared LBS offers/messages with family and friends (collective social action). Individual needs and interests also predicted LBS response while value of location services and perception of risk mediated individual response behaviour. Nonetheless, internet mediated activities and interests may present challenges: how, when and where to reach individual consumers with LBS stimuli. Results show how consumers seek value in these services albeit cautious of potential risks inherent in granting access. This needs to be investigated further in a group setting in phase three where the implied trade-offs can be discussed in depth.

5.3.3 Individual differences in LBS response

Results pointed to differences in consumer response based on individual factors: links to objective five and question five (research phase three). Section 5.3.3.1 reports on person specific factors whilst section 5.3.3.2 presents findings on individual perceptions of risk influence response in LBS encounters.

5.3.3.1 Person specific factors causing variations in response patterns

Results indicated how younger consumers embrace and respond more readily to LBS stimuli than their older counterparts. For example:

> *"It's interesting because if I was getting some of the messages I'm getting now when I was not in a full time job when I was a student, I would be more inclined to, I think I would welcome them more. Whereas now I think I am at a stage where it gets nuisancy… And I'm a little bit more cautious why they do it now because they want to entice expenditure or custom… It depends on life stage."* [R20F -PERSF]

Interestingly, age and occupation is thought to influence behavioural intention towards location services: younger consumers in education were more likely to engage and respond than older professionals in employment. Nonetheless, this view was expressed by only a minority of respondents hence results may not be truly representative of the consensus. Hence this result may need to be explored further. Put differently others see how age influences LBS response patterns:

> *"Cause there is times when I remember doing it a lot but I think I don't do it as often as I used to [As you used to yeah], otherwise that just comes with age you know!"* [R6F -PERSF]

Thus, one of the key insights is how that younger people are more inclined to respond to these services thus *'checking in'* to LBS may become irregular with advancing age. Similarly, others state how life stage influences response to location services:

> *"I think maybe younger people would do that. If I, back in the day if I had access to these applications when I was a lot younger than I am now. I think I would have utilised these applications. We used to go to town or wherever, and this is when I think I would have used those applications to send offers or let them what I am doing, how I am doing and who I am doing it with."* [R16M -PERSF]

Apart from life stage, some respondents admit to being slow to embrace new services as stated:

> *"You know myself, I'm just getting used to it I'm not really aah, I'm not really of a 'selfie' 'selfie' person, a bit of an old fashioned people."* [R1M -PERSF]

This member refers to being old fashioned when it comes to using some location services for social purposes. This result is quite surprising given the respondents' age, nonetheless, when we think of the adoption process (see Rogers, 1995) this may refer to late adopters or laggards who take time to embrace new services. Another interesting find relates to some indication of gender influences on typical response patterns:

> *"Aah some people like it, like I would say for my woman friends it's like they will say what is your update [Yeah] can I use your code [Ok] but for the man friend I mean the guy friends they are gonna be like what is that why are you receive that a lot [Ok]. Yeah it's gonna be like different reactions."* [R8F -PERSF]

Thus, results demonstrate how social influence and gender may influence consumer perception and typical response to LBS: women may positively respond than men. This section, has demonstrated how that personal factors influence individual response patterns. Key emerging factors were: life stage (occupation- student or employed); young versus old; gender and the stage in the technology adoption cycle (e.g. late majority or laggards).

5.3.3.2 Risk Perception influencing individual response behaviour

Some respondents indicated how trust plays a crucial role in individual decision making as illustrated:

> *"I believe I trust the brand and it just act as a reminder you know, like I should get this. Like I'm short of something and I should get it. We tend to believe, and tend to you know trust the brand we often see and we have experienced this brand. Because that way, you will reduce the risk we will take if, for example, otherwise you know if we are not familiar with the brand, for you know like we don't know the quality of the product*

and we don't know like the pricing strategy of the brand so you know like we will get a little puzzled and feel risky to take this new brand." [R7M -INDICOPRIV]

Thus, some respondents are more inclined to engage with and respond to LBS for familiar brands where trust is built over time thus reducing risk perception than others. Similarly, other respondents highlight trade-offs between value and risk: concern about intrusive LBS as noted by R10M: "*It might tell of things like flight is nearer leaving the airport, maybe when prices change or things like that. Though they may be aah, a bit intrusive sometimes.* Nonetheless, such concerns may be addressed by personalisation as stated:

"I think with – [inaudible] one, probably because they already customers and they have the full mobile numbers of these people; my friends or whatever. Maybe that's why they will have received the offers and so forth." [R11F -INDICOPRIV]

*"Of course, I will ask myself how did they get my number, my contact but aah, if something that I had, I have signed up to from there before then I wouldn't mind." [*R5F- INDICOPRIV]

Results in this section provide interesting views on how perceived risk potentially influences individual responses to LBS. Thus, whilst some respondents are indifferent to unfamiliar LBS, others see personalisation as key to influencing attitudinal response.

5.4 Summary of Phase Two Findings and Implications for Phase Three

This phase of research addressed objectives 3 and 4: gaining insight into the role of e-lifestyle, situational decision making and response patterns in actual LBS encounters. With regards objective 3 and 4; some significant insights were observed. (See, Table 5.4 for summary). These are briefly summarised in the next sections.

5.4.2 E-lifestyles and individual response

The second part of objective 3 was centred on uncovering how e-lifestyles influence individual response. Findings did not point to individual differences in behavioural responses based on gender at this stage. This finding was in turn explored further in part B (follow on interviews) where written responses were elaborated on and deeper insights emerged. Key insights also emerged regarding the role of situational context on consumer response in LBS encounters: 'timing of offers'; 'who is using the offer'; and the 'location/place of encounter'. Thus, the

scenarios (Part A) provided key insights on actual consumer response to LBS as well as a snapshot of the role of e-lifestyles and situational context in individual response.

5.4.3 Situational influence on customer response

From the interviews, findings demonstrate how many respondents are now accustomed to using LBS to conduct daily activities. Results from the scenario analysis (cartoon tests), pointed to positive attitudes to services bringing convenience in various contexts: search and navigation; communication (real time – simple to complex); shopping; entertainment (e.g. gaming). Respondents are discerning, seeking a means with which to easily access location services 'on the go'. We also noted how e-lifestyles (e.g. e-activities, e-interests) shape responses to LBS. Overwhelming evidence from this phase suggests that relevant e-values and e-activities exert a positive attitudinal effect on LBS response.

When looking at situational decision making, most respondents expressed positive attitudes towards relevant LBS delivered in transit. For example, receiving an LBS message as one passes through a shopping centre; or at lunch when actively considering buying food potentially led to positive behavioural response. In contrast, respondents noted how irrelevant and poorly timed LBS info would be negatively received. Positive behavioural response to LBS was linked to value perceptions.

Two unexpected results emerged from this phase were the role of person specific factors and perceived risk influencing behavioural response. These factors were initially observed in Part A (scenario analysis) and then explored briefly in Part B (follow up interviews). There was some indication of potential differences in behavioural response between groups (younger students and mature workers); with more likelihood of students responding positively in LBS encounters. There was some influence of life stage (students versus employed professionals) on behavioural response: with young unemployed more likely to respond to LBS stimuli than their young employed counterparts). Thus, varied attitudinal responses at different life stages may influence the level and nature of individual response. Furthermore, results indicate how gender may indirectly influence individual behavioural response in actual LBS encounters. When we look at results from scenario and follow up interviews, there appears to be a lack of consensus regarding the role of age per se. Perceived risk (e.g. transaction) influences response to LBS. Where this was the case, brand familiarity was a key mediating factor to positive behavioural response. Trust issues were allayed where options for personalisation were

provided (e.g. '*opt'* in and '*opt out'*). It was hoped to address this aspect of brand familiarity further in the focus groups interviews.

This phase sought to answer objectives 3 and 4 (see Table 4.2 and Appendix 11 Figure 9.1) using specialist interviews to capture actual consumer response in (near) real time LBS encounters. As such results highlighted actual consumer response patterns; identified the impact of e-lifestyles and situational decision making in individual response contexts. However, these results may only represent individual level views – the researcher felt a need to verify some of these findings in group discussion in phase three focus group interviews. Further insight may be gained in phase 3 where such findings can be revisited, and discussed with a sample of consumers experienced with location services (triangulation). Furthermore, when we look at emergent themes; variations in individual response show a need to explore further the influence of person-specific and lifestyle factors further. In addition, a follow up phase has potential to draw from a sample of richly experienced respondents to demonstrate how value perception and individual factors may influence response behaviours.

Phase two has provided both a deeper explanation and richer account of patterns noted in phase one – with a snapshot of real consumer responses, motives and perception) on select LBS encounters. The next phase will help to gain a triangulation of data between initial observation data, consumer response data from phase two and more focus on the role of individual factors on consumer response in phase three.

Themes & Sub themes	Example Statements	Evidence of Theme (s) from Respondent Statements
Evidence of E-lifestyle Footprints E-lifestyles Influence Individual Response	*"Cause I, well pretty much every day, especially when you are going to new areas." [R1M-EEL]* *"It will show restaurants, and petrol station because I always search these on Google maps especially petrol stations. Yeah, I'm always on the road. Ok, with my job it's every day." [R14M-EEF]*	Routine LBS use E-lifestyles influence
Typical Response Patterns Response Pathways	*"No response as there are several stages to the likelihood of eventually being the lucky winner." [R3FCTM -IGNOREOFF]* *"Clicking the link to find out more about the event." [R15CTM -CHECKO]*	Indifference Immediate Response
Situational Decision Making	*"…It's quite interesting actually because sometimes I didn't use GPS on the phone [Ok] and I just pass through the Dominos store and I get the text. Aah, probably l-last month …" (R8F -SITCO)* *"…I was to get a text then from H&M or Selfridges when I am walking by, I would go in… sometimes send me notification in the morning 'popping up' saying have you used this restaurant and this restaurant it's near you and stuff." [R9F -SITCO]*	Situational Context
The role of Person Specific factors Elements of Risk And Brand Knowledge	*"…because if I was getting some of the messages I'm getting now when I was not in a full-time job when I was a student, I would be more inclined to." .[R20F -PERSF]* *"I believe I trust the brand and it just act as a reminder you know, like I should get this." [R7M -INDICOPRIV]*	Lifestage Differences Risk Perception Brand Knowledge

Table 5.4: Summary of Scenario Responses

5.5 Findings from Phase Three of Data Collection

5.5.1 Introduction

The main purpose of the phase three was to offer deeper explanation and richer description of results from earlier phases (See section 5.5) as well as to provide deeper insights into consumer behavioural responses in LBS encounters (see Appendix 8). Respondents for the focus group interviews were (a) young professionals, (b) students (both undergraduate and post-graduate) and (c) older respondents (all five respondents were in employment at the time of the interviews). The objective of choosing different groups was because of findings from phase one in this study; indicated need for further insight (e.g. exploring further the role of lifestage in LBS response). In addition, literature (Perks, 2012; Abeele et al., 2014; King, 2016) pointed to potential differences based on lifestage or individual factors. Three focus groups were conducted and five key insights emerged:

- Consumer awareness, attitudes and experiences with LBS
    - Challenging attitudinal factors
- E -lifestyles and unlocking customer equity with LBS
- Situational decision-making influencing response
- Response pathways and role of life stage
- The role of Branding in consumer response

Therefore, Section 5.5 focuses on focus group findings, followed by Section 5.6 which summarises key findings from Phase 3 highlighting implications for consumer response.

5.5.2 Understanding varying consumer awareness, attitudes and experiences with LBS

Respondents across groups (young and old; students and employed) displayed good awareness of location based services (LBS e.g. apps and location based advertising - see Appendix 8 and Appendix 9). It was evident throughout the discussions (that) participants had either responded to or interacted with LBS:

> *"Oh yeah, I think, can I talk of my recent experience, my recent experience is I think I was passing by High Cross and I got an offer from Nando's. I don't know what they were*

saying like I think it's interesting so I guess food (some laughter from other respondents).” ***(R5FG1, Young professional)***

“I would've said I don't use location based services but now that you've explained to me more I could say yes I use location based services. I do get them but I hadn't realized what they are.” ***(R3FG1, Young Professional)***.

“We have different like ways to enhance location like different filters recognising colours like if you want to show people where you are, so for like if you're in Brazil it to have like a logo for Brazil so it'll be pretty if you're taking a video or something.” ***(FG2-R3, student)***

Thus, varied experiences ranging from food retail to entertainment (e.g. sharing updates about holiday via social media) emerged. Interestingly and in line with literature (Mir, 2012; Persaud et al., 2012), there is some passive awareness when it comes to emergent services such as LBS (e.g. R3FG1 who was prompted to recall receiving these location services). Somewhat surprising, all older respondents appeared to be highly aware and engaged with various LBS (active awareness to top of mind awareness). As noted by R3 and R1:

“True caller well…if somebody calls me I don't know their number I don't know their location so the phone shows me the person's name and where you are calling from …and I know that eeh, eeh and I think this app is really useful for me and also what I do is if somebody calls me and probably I need to go to the place where they are so through the phone I can be able to go to Google maps through that.” ***(MFG, R3, Older Group, College Tutor)***

“There is many apps like phone and pay and such as that. Tickets let's say you don't have any cash when you or you go to you want to see where the nearest parking space is. It shows you where the nearest parking space is so instead of you, if you don't have any coins. So if you don't have any coins on you, it allows you to pay for parking via an app. Then it can locate you where you are and it can also tell you where the nearest parking.” ***(MFG3, R1 Older Group- Business Development Manager)***

Findings demonstrate how the older group actively use LBS for both leisure and work purposes but mostly centred on work. This is relatively fresh insight in terms of specific LBS choices where overall the younger group mostly use pleasure/leisure related services (e.g. shopping, entertainment) unlike the older group who are more inclined to use work related location services. This result is somewhat contrary to literature (e.g. Perks, 2012; Abeele et al., 2014; King: In Mintel, July 2016 Perks: In Mintel report January 2012; Abeele et al., 2014; King: In Mintel, July

2016) where older respondents are perceived to be lagging in adopting new mobile based services. More mature respondents are highly aware of LBS and have experience with work related LBS. In contrast, there were mixed awareness levels among younger respondents; their choice of LBS centred mostly on pleasure or shopping purposes.

5.5.3 Challenging Attitudinal Factors-

Research Question 5 - What individual characteristics might link to individual behavioural response towards LBS (e.g. perceptions of value and risk, life stage and family life cycles etc.)?

A key question and objective of research phase three was to establish the potential role of individual perceptions and individual characteristics in LBS response. Results pointed to two key attitudinal positions: positive or negative beliefs and feelings towards LBS. To start with positive beliefs and feelings; one key benefit is convenience as noted by R3 and R4 who narrated a previous experience where an app used to pay for parking was used (Phone and Pay mobile app):

"…There is (sic*) many apps like Phone and Pay such that tickets let's say you don't have any cash you or you go to, you want to see where the nearest parking space is so instead of you if you don't have any coins* (sic)*. …it helps because sometimes you don't have cash on you all the time so it is a good app... very, very convenient… you don't need to leave your home or call 118… you just find it on the app"* ***(MFG3, R1 Older Group- Business Development Manager)***

> *I think they make life easy because I find if I'm looking for a database I just go to the app and I click to the app and it will show me maybe this is at this location so it makes it easier for me to locate them to go to their offices one by one. I just go to the app which I need and I just search for businesses around there."* ***(MFG, R4, Older Group, Entrepreneur)***

> *"But on the other hand I find out that if you have such kind of aah pop-ups, they help you, you know. it's like a reminder to you to say that if you go to such and such a place there is this thing happening you know you're going to get a discount at such and such a place you know. So, I still find that they are useful because they are actually direct you that there is something going on here."* ***(MFG, R2, Older Group, Accountant, part - student)***

Older respondents believe that LBS (e.g. apps) makes their search tasks easier when locating businesses. Secondly, locating or making payment for parking as well as receiving location specific retail offer notifications via apps (e.g. Unidays-R2). Interestingly, most of the apps are

proactive LBS (user initiated); more specifically self-referencing which do not result in privacy concerns. In terms of younger respondents, positive sentiments were expressed for reactive LBS (LBS provider initiated) particularly those of a cross-referencing nature. This is commented on by R3 who used a BBC news app to easily access news:

> *"…I don't have much time so I downloaded the BBC app. So, it just says the news to your phone so when you click up it just gives you all the stories, that's really convenient."* ***(FG2-R3, Student)***
> *"Again just for the convenience factor of it"* ***(FG1-R2, Young Professional)***

Thus, younger respondents (young professionals and students) who are receptive to reactive LBS see convenience in accessing aggregated services such as news and notifications. Nonetheless, some respondents (both young and old) were indifferent to LBS as noted below:

> *"I find them a little of an inconvenience sometimes, sometimes I find it a little bit invasive if I wanted an offer I would actively search for it myself okay. I don't want somebody else to link me with an offer or something."* ***(FG1-R2, Young Professional)***

> *"Aah, sports direct you know their products come from China written already reduced price. But they never reduce that's the normal price that they are charging. It's just those stickers which say sale, sales they come straight from China manufacturer themselves. So I don't believe in what they say that...*
> *because it's on sale everyday 365 days a year (others laugh)."* ***(MFG3, R5, Older Group, Accountant)***

> *"Yeah, no I rarely respond, I couldn't tell you a time when I responded to a text message, when I received a file when I'm out shopping and it says or do this or do that. I don't think I've ever had… if it straight from the shop* I just ignore it, *yeah."* ***(FG1, R2, Young Professional)***

There are varied attitudes towards emerging services such as LBS. Here, respondents expressed negative feelings (e.g. R2- inconvenience) regarding exposure to and engagement with LBS. Others expressed distrust (e.g. R5); yet some others were indifferent (e.g. R2) to new services such as LBS. This pattern echoes the work of Kleijnen (2007) and Abeele et al., (2014), who identified how consumers expressed negative feelings towards services delivered via personal devices: due to perceived inconvenience.

Nonetheless, as is the case with any new service, and in line with Roger's (1995) ideas on the adoption of innovation, these services can be adopted enthusiastically ("*Yeah as long as it is*

relevant."- FG1, R1, Young Professional, Age-). Others see that trade-offs can be made - personalisation (e.g. permission and subscription options with LBS) may result in positive LBS attitudes, as noted by R5, R2 and R3:

> *"Although what might outweigh that it's something that is really a good offer then I'll see (makes a strange noise to signal reaction to an outstanding offer, others laugh)"* ***(FG1, R5, Young Professional)***

> *"Absolutely as long as I am in control and I can benefit from it and I can make a decision then absolutely… why not, it is on my terms I can control them. Don't harass me when I'm not interested (others laugh). You know that's what it is that's why I have a club card because I want them to send me offers according to my purchase habits."* ***(FG1, R2, Young Professionals)***

> *"Eeh, the trouble is if you download a certain app, for you to go ahead it will ask you to enable location."* ***(MFG3, R3, Older Group, College Tutor)***

Thus, respondents (both younger and older) feel a need to subscribe to control what they receive. Another interesting find was how some respondents adapted to LBS over time as noted by R4:

> *"I think first when that happened I was like how did you know I was here? that was the first reaction but I think you just get used to it."* ***(FG1, R4, Young Professional)***

To summarise this section, older consumers generally have positive feelings towards proactive LBS providing convenience (e.g. pin pointing location; notification of offers) and personalisation opportunities. In contrast, younger consumers (young professionals and students) expressed interest in some reactive LBS which deliver value and convenience (e.g. Unidays). Based on participant narratives, this group was time poor and would welcome service notifications addressing a need. Nevertheless, there were also calls for personalisation (e.g. permission and subscription). This pattern is supported by Persaud et al., (2012) who found that delivery of proactive messages can result in positive attitudes towards LBS. There is potentially a need to follow up on these findings in the next phase of research.

5.5.4 E-lifestyles and unlocking customer equity with LBS

This section discusses consumer lifestyles (e.g. e-lifestyles) seeking to explore factors motivating consumers to use LBS. Many respondents stated how they routinely use various LBS to accomplish tasks. For example, most respondents in the older group stated:

"…due to the nature of my job …so, I use it on a daily basis, because I'm travelling a lot so it does help me a lot to find nearest facilities, or where the nearest shop is and then I sort of towns to visit that place. So, it's a tool that I use quite often on a daily basis." ***(MFG3, R1 Older Group- Business Development Manager)***

"My Messenger, if you Wanna catch a train, I go onto the app look at the times if I want to know whats up with that app on my phone that summarizes all the news from me. In services sources that I select; if I want to know the weather I look it up on my phone you know it's just all there." ***(MFG3, R3, College Tutor, Age)***

Thus, older respondents expressed how LBS (e.g. apps-R1) assist in locating nearby and relevant facilities daily as part of ones' job. Secondly, mobile phones are now centres for accessing and receiving contextualised services (e.g. travel, communication, news and weather updates) as R3 illustrated. Interestingly R1 refers to a *'tool'*: LBS is something essential for completing tasks. Younger respondents with 'demanding lifestyles' (busy) routinely use these services as indicated by R2, R1 and R3:

"Yeah, yeah I think they aid my lifestyle…because I'm so busy, just information you find it more accessible it's at hand… it does support my lifestyle…if I reach where there is free Wi-Fi, I check -in … I think it's like dump me down a little bit I don't know how to read a map…. like if tomorrow I do not have it on me; I ain't going nowhere, because I'm so reliant on Google maps or Tom-Tom to navigate... I used patient line a lot which is an app, because I self-diagnose before I go to the doctor." ***(FG1, R2, Young Professional)***

"I went to Tokyo I checked in there, Abu Dhabi I checked there when I went to London because I lived in in Scotland. It was convenient so I just checked in. it depends if you are on holiday you just tell people the first thing that I am in this country. in this city and you can just check-in in a hotel with a picture to tell them what I am doing. I am enjoying working…check-in every time because you do different things." ***(FG2, R1, Student)***

"Well I tend to, I wouldn't do it if I just suddenly on a Saturday morning go to a Starbucks, or something. It's got to be if I went somewhere I have never been or really exciting." ***(FG1, R3, Young Professional)***

Most young respondents; young professionals and students expressed how they are heavily reliant on LBS 'checking-in' (announcing their presence) as well as using apps to support healthy lifestyles (e.g. R2). When thinking about consumer response types, this points more towards proactive LBS. Thus, most participants from these groups have got *'wired lifestyles'*: using mobile devices for almost every aspect of their life: would be lost without these. Ahmad et al., (2010) referred to this behaviour as a 'wired lifestyle 'where individuals are accustomed to using the

internet over a long period. Similarly, Bellmann, Lohse and Johnson (1999) and Chiu et al., (2014) expressed how online consumers exhibit a unique lifestyle different from an offline lifestyle. Furthermore, Ling (2001, 2004) muted how this lifestyle is developed as part of adolescent life. Whilst there appears to be a more defined digital footprint (e-lifestyle and/wired lifestyle) among younger consumers, Galletley (2016: In Mintel) referred to a new group of consumers called *'transumers'*. This group seek; *'anytime'*, *'anywhere'* access to services in places of commute regardless of life stage or individual factors (e.g. age).

When thinking of individuals with *'wired lifestyles'*, findings from this research point to the pivotal role of the mobile phone in providing access to LBS (as muted by Abele et al, 2014). In this research, respondents indicated various motivations for either engaging or not engaging in LBS ranging from ease of use, utility value and security (protection). As noted by most older respondents; R1, R3 and R5:

> *"So I just find that a time to just go to my mobile phones and find restaurants near me, restaurants and takeaways, supermarkets or retail stores near me or anything I am trying to look for which is easy using my mobile phone"* ***(MFG3, R1 Older Group- Business Development Manager)***

> *"It is only when I've got something specific that I'm looking for and I just don't accept deals randomly and things like that it's only when it is of utility value for me..."* ***(MFG3, R3, Older Group, College Tutor)***

> *"I now know that this number has been rated by so many people as spam and I know that eeh, eeh and I think this app is really useful for me…I think they are more secure unlike just going to the website, if you use the apps I think it is more secure. So that you know those people like to steal your information may not steal it"* ***(MFG3, R5, Older Group, Accountant)***

Older respondents with well-established e-lifestyles are motivated to receiving location services meshing with their needs, thus utility value when *'on the go'*. This result supports the work of Gronros (2010), who noted how consumers are generally more discerning, seeking more comfort, value (lower additional costs) in the use of goods and services. Secondly, these LBS need to be of utility value hence the need to determine what constitutes utility value for this group. Somewhat surprising, the older group are motivated by security of apps (e.g. call tracking apps e.g. True Caller) and protection (e.g. banking app for international account holders as well as tracking of children) as stated by R5.

A similar pattern emerged for the younger group in terms of motives for engaging in LBS. Nonetheless, motivations for the younger group centred mostly around deals (offers), interests (e.g. health lifestyles), emotional attachment and security:

> *"At the moment, I like to travel so fussy deals that would be amazing."* ***(FG1, R2, Young Professional)***

> *"I do but most of the time it's like buying stuff on promotion." (FG2, R2, Student, Age-)*

> *"So yes if it's something about cats I'll click it because it's something that I think I am interested in just to get back to the point (laughs).* ***(FG1, R3, Young Professional)***

> *"Like our one I particularly use this day is like if you're on the training, dieting it keeps track of what you eat and the calories you eat, so you just take a picture and it tells you everything. And it also tracks your diet."* ***(FG2, R2, Student)***

> *"And I also feel some of these messages that you get it's got an emotional attachment. Such that when you say like okay for me it is shopping not food."* ***(FG2, R5, Student)***

> *"There is a similar thing you, know the Facebook safety checking thing, …that if you're somewhere where there's disaster then Facebook says do you want to mark yourself as somewhere safe, have you heard of that?* ***(FG1, R1, Young Professional)***

Thus, while both older and younger groups see value in deals and security (e.g. Facebook safety checking-R1), for the younger group more emphasis is placed on outstanding deals ("…*amazing fussy deals…"*- R2). Secondly, younger respondents are motivated by apps that support healthy lifestyles (e.g. dieting and calorie tracking). Furthermore, LBS with an emotional attachment are more amenable.

Many respondents also identified concerns over privacy and insecurity as obstacles to engaging with location services. As noted by R3 (Older group); R5 (Student) and R5 (Young Professional):

> *"I am really worried because wherever I'm going anybody would like to* ***track me*** *can track me where I am because with this location it can, people who know how to use these things is thinking, they can easily spot the location exactly where you are and things like that and also* ***personal details*** *you know because somebody can* ***actually steal your personal details*** *you know. I am just a lay person I may not know how to protect myself from some of these aah you know* ***tigers*** *who were out there to you know so that's what I'm worried about my personal details and things like that.* ***(MFG3, R3, Older Group, College Tutor)***

"Aah, to be honest if all idea just creeps me off! Like when you're on your phone and then the next thing you just say something like you just see a message." ***(FG1, R5, Young professional)***

To sum up, findings demonstrated how both younger and older respondent groups chose LBS that support individual lifestyles- Students and Young Professionals exhibited more pronounced e-lifestyles (wired lifestyles e.g. 'checking-in, tracking calories). There were mixed motivations for responding to LBS: both groups are motivated by deals and perceived value but some trade-offs exist between concern over intrusion (e.g. misuse of personal details, transaction risk and unauthorised access). The pattern of concern supports the work of Anderson (2013) who noted the difficulties of reaching consumers in geographically dispersed areas hence unwanted LBS may be delivered (e.g. cross- referenced location based adverts). The pattern in terms of trade-offs echoes Xu et al., (2011) who argued that consumers will allow privileged access in exchange for something of value.

5.5.5 Response pathways and role of life stage

Phase two highlighted various response patterns in simulated LBS encounters and the potential influence of life stage on consumer response. Therefore, phase three (focus groups) sought further insights on these response pathways as well as the role of life stage. In line with previous phases, most respondents delayed responses. As noted by R1 and R3 (Older group); R3 and R1 (Younger group- students):

"I am a very skeptical person and I don't want to be rushed into things so I will prefer the one that lasts for a month. So I can do more research." ***(MFG3, R1, Business Development Manager)***

"I don't want to be swayed because in that way I become impulsive in terms of my buying behaviour you see saw I wouldn't want to and respond you see to that because that is going to force me to buy something that I did not intend to buy now if I want if I want something and I really want it for a good price I can still go and search." ***(MFG3, R3, College Tutor, Age, 53)***

"Not straight away sometimes you just say well I will respond later." ***(FG2, R3, Student)***

"You can compare that offer with the market maybe everyone is offering promotional voucher and that company's just selling it as it is." ***(FG2, R1, Student)***

An extended evaluation and search process emerged hence some respondents were involved in an extensive decision-making process. Thus, respondents were discerning as well as cautious and sought to verify the offers first before responding. Other respondents indicated how social influence affected response pathways as noted by R4 and R6:

> *"I don't know like if you receive to receive something and just chatting about it to your friends or colleagues wherever. Obviously, they have their own viewpoints or they are all experienced about that product or what they think about the brand. But that does reflect on our decisions as well."* ***(FG2, R4, Student)***

When receiving LBS messages, that there is a tendency of forwarding these to friend implying social influence as stated:

> *"Yes I would say if I was to get a message from a friend to say check this out this something going on in town tomorrow maybe I will give it a thought. If it's like that and it's coming from them then I might end up going but to an extent."* ***(FG2, R6, Student, Age)***

On the one hand, messages received in the presence of others (friends) and those sent to an individual by their friends would also influence response. Interestingly social influence was echoed by young respondents only (e.g. students) unlike the older group who appear sceptical. Nonetheless, a minority of the older group are open to these LBS messages as noted by R2: *"Usually go for* ***the day****, yeah because they think tomorrow it's not going to be there let me go and buy it that's why you find those sales that they do at aah, aah, I think it's Next."* ***(MFG3, R2, Accountant).***

Another notable result was the influence of life stage on consumer response; an emergent result from phase two (exploratory phase). As noted by R3 and R5 (Older group):

> *"So for me especially* ***at my age*** *I don't want just to be swayed by mere adverts… I have* ***got a family****, have go to plan my life, I have got to have a budget. I don't want to go beyond aah, end up going beyond activities that I did not plan."* ***(MFG3, R3, Older Group, College Tutor)***

> *"As a* ***man*** *I think those pop-ups they don't work because. Aah I use like the banking app, there is always like the discount offers but I just ignore them and they are not based on my lifestyle. so, I just ignore them I don't use them. But when it comes to another gender, let's say* ***women****, if they see an email or a pop-up saying sale, they always push us, they do…"* ***(MFG3, R5, Accountant, Older Group)***

It was noted how that age, family life cycle (married with children) and gender influences response. This result is partly congruent with literature. For example, a Mintel report (January, 2012), Abeele et al., (2014) and King (In Mintel, July 2016) all noted how age influences engagement with mobile based services (e.g. LBS). Here, older respondents were perceived to be lagging their younger counterparts. And interestingly, there were also contradictory perspectives on the role of age/life stage on individual response evident from indifference by both young respondents, R3 and R2:

> *"No ahh, to be honest I don't like that either and I don't like as a certain **age** I'm. like now when I go on Facebook in between stuff I get adverts relating to **ovulation** or pregnancy test just because they know I am 32."* ***(FG1, R3, Young Professional)***

> *"Personally, I think because if I have **family** or something like that then providing for them in terms of something like food seems to be more important but as I say I think it depends on circumstances."* ***(FG1, R2, Young Professional)***

Nonetheless, literature (e.g. Mintel, 2012; Abeele et al., 2014 and King [In Mintel, July 2016]) only addresses age and gender yet findings from this research specifically refer to lifecycle (e.g. family; ovulation). To sum up, older respondents were sceptical of some LBS hence exercised caution in response: delayed response. In contrast, younger respondents more specifically students acknowledged the potential role of social influence on behavioural response and in most cases, this resulted in immediate response. Whilst extant literature (e.g. Venkatesh and Davies, 2000 and 2003; Lu et al., 2005) muted the role of social influence in consumer response, these results provide a refined indicative profile (younger consumers) in response pathways.

5.5.6 Situational Decision-Making influencing response

This section explores the role of situational decision making based on earlier findings from exploratory phases (Phases 1 and 2) of this research. In this phase (Phase Three) R1and R3 (young professional) and R4 (Student) expressed that:

> *"**Sometimes*** if I'm not so bothered maybe I click on it and I scan to find the ***expiry day*** and that's it…it's actually a good thing **if I'm thinking about somewhere to eat** for example and then I see some an offer that kind of sways my **decision**…*"* ***(FG1, R1, Young Professional)***

*"I don't like adverts when I'm listening to the radio that's really **into the groove** well how all long did that text last well like **if you're listening to radio debate or a podcast**... so you don't wanna do it in **London** when you're in **Leicester**... but when I'm in London I do."* ***(FG1, R3, Young Professional)***

*"It depends it depends on the situation itself for example **if I am hungry** I'll respond to it but if I'm not I'll just ignore that ahh.* ***(FG2, R4, Student)***

In terms of future response intentions, some respondents (e.g. students and young professionals) argued the role of situational decision making in LBS encounters. There is potency in knowing when (timing) and where (location) to reach consumers with tailored offers as muted by Zhang et al., (2012). However, findings in this phase provide a richer narrative of situations where/when respondents' decisions would be indifferent. For example, R2 (young professional) expressing how LBS adverts interrupting a routine (e.g. a scheduled podcast or radio debate) are unwelcome. Thus, contextualised LBS offers (e.g. food related adverts delivered when one is hungry- R4; Student and LBS for delivered in unfamiliar environments-R3, Young professional) influence decision making.

5.5.7 Establishing the role of Brand Familiarity in response

We observed in the earlier research phases the need to further examine the role of brand knowledge in consumer responses. In phase two, we noted how respondents see value in familiar brands where prior experience provides a point of reference: emerging insights from the exploratory stage. Thus, this stage sought to provide richer insights on branding by identifying past experiences across groups. Therefore, the researcher used brand mapping (e.g. using visual aids of different brands) to get as much insight as possible on brand oriented influence. Brand knowledge was noted by R2 (Young professionals) and R2 (Student) as important:

*"Because I feel quite **secure** and I'm used to **familiarity**. So familiarity is important for me when I'm gonna invest in something…The thing is **brands that are not delivering** on their service are not going to affect me unless I decide to follow through on the offer."* ***(FG1-R2, Young Professional)***

*"I think it makes a **difference** when you look at **Matalan and compare to House of Fraser** clothes are like a lower **price**. So I will respond better to House of*

*Fraser than Matalan. It comes to phones it depends if this version being offered is a **step higher** than what I currently have." **(FG2, R2, Student, Age)***

Rspondents pointed out the importance of brand knowledge in both current and future LBS responses. Some consumers are more receptive to LBS from well-known brands (e.g. Gucci; R2). Interestingly, preference for high end, expensive brands was expressed by a few older respondents. In contrast, some younger respondents (e.g. students; R2) made comparisons between Matalan (value) and House of Fraser (mid-range). Therefore, brand knowledge (e.g. perceived performance and psychosocial meaning) may be used to draw inferences on product/service quality and to signal more authenticity in an LBS offer. Prior brand knowledge provides assurances that the brand linked to LBS will perform and can also be relied upon. Consumers unsure of how emerging services (e.g. apps and location-based adverts) will deliver can rely on brand familiarity indicators.

Themes & Sub themes	Example Statements	Evidence of Theme (s) from Respondent Statements
Variations in consumer Awareness and Experiences	*"…services but now that you've explained to me more I could say yes I use location based services. I do get them but I hadn't realized what they are." (R5FG1, Young professional)*	Passive Awareness
	", my recent experience is I think I was passing by High Cross and I got an offer from Nando's. I don't know what they were saying like I think it's interesting…" (R5FG1, Young professional)	Recent experiences with LBS
Challenging Attitudinal Factors	*"…I just go to the app and I click to the app and it will show me maybe this is at this location so it makes it easier for me to locate them to go to their offices one by one…" (MFG, R4, Older Group, Entrepreneur)*	Motives for using LBS
	"I think first when that happened I was like how did you know I was here? that was the first reaction but I think you just get used to it." (FG1, R4, Young Professional)	Indifference
Response Pathways and Lifestage	*""Not straight away sometimes you just say well I will respond later." (FG2, R3, Student)*	Delayed Response
	"So for me especially at my age I don't want just to be swayed by mere adverts… I have got a family, have go to plan my life." (R3, Student)	Lifestage elements
	"…if I was to get a message from a friend to say check this out this something going on in town tomorrow maybe I will give it a thought…" (FG2, R6, Student, Age)	Socially Mediated Response
Situational Decision Making	*It depends it depends on the situation itself for example if I am hungry I'll respond to it but if I'm not I'll just ignore that ahh. (FG2, R4, Student)*	Timing of LBS offer
Role of Brand Knowledge in Consumer Response	*"…Because I feel quite **secure** and I'm used to familiarity. so familiarity is important for me when I'm gonna invest in something…" (FG1-R2, Young Professional)*	Brand familiarity Risk Perception

Table 5.5: Outline of Emerging Themes from Semi-structured Interviews

5.6 Summary of Phase Three Findings: Implications for Consumer response

This phase sought to generate discussion around LBS, to uncover more on emergent lifestyles (mobile/wired/e-lifestyles) as well as bring to life the key influences on consumer experiences. Richer insights into earlier findings (e.g. Phases 1 and 2) were achieved in terms of understanding consumer experience of LBS. Five key themes emerged as influential on consumer responses (See Table 5.5). First, varied experiences with LBS emerged based on lifestage. Some mature respondents responded more to work-related LBS which were proactive in nature. This contrasted to students who sought leisure related deals (offers) that included reactive LBS. Secondly, mixed motivations for responding/not responding to LBS stimuli emerged. Mature respondents appeared motivated by utility value and security. In contrast, students with *'on the go'* lifestyles use LBS to support routine activities (e.g. *'check-in'* or use of health-related apps). Thirdly, phase three findings gave further insight into the response pathways identified in phase two- providing more evidence of how consumers are more discerning and cautious in the face of new mobile oriented services, in line with Gronroos (2010). Many respondents were inclined to make delayed responses and expressed concerns over insecurity and privacy. Given mixed feelings regarding these services, personalisation was key to allaying concerns about privacy.

Some in-depth insight into the role of social influence in LBS response and the situational decision making among younger respondents (Students and Young professionals). Situational decision making emerged as a pivotal aspect of consumer response for young respondents. Thus, delivering contextualised location services may influence future situational decision making. The researcher, in consultation with respondents obtained explanations on when and where LBS may or may not be favourably received: contextualisation was a key consideration, a pattern that reinforces the findings of Donovan (2013) who noted the challenges of marketers as the ability to know how consumers engage with mobile services and how to tailor appropriate strategies. Finally, richer insights emerged in the role of brand familiarity, where fuller narratives demonstrating that brand authenticity was important emerged.

In the next chapter, combined results from the three research phases of this PhD are discussed bringing together key insights and interpretation of findings.

Chapter 6

Discussion

6.0 Introduction

Throughout the three research phases of this study, various insights on consumer awareness and response to LBS as well as lifestyles emerged. We saw how most respondents were familiar with LBS while emerging lifestyles, role of situational decision making, actual consumer response patterns and the role of life stage was observed. Based on these findings, a deeper understanding has been gained into consumer response to LBS; the role of individual attributes, variations in customer pathways and framing of typical customer response pathways.

Participant responses from phases one and two of the study were reconsidered in the light of phase three findings and with reference to prior LBS literature on consumer familiarity and attitudes, emerging e-lifestyles and situational decision making. Key themes (see Appendix 15, Table 9.9) were then explored further in phase three of this study. This chapter brings together key findings from the three research phases. Section 6.1 discusses current LBS awareness levels and varied experiences in the UK context; while Section 6.2 explores the range of individual attributes, person –specific factors and e-lifestyle factors that emerged as significant in the findings. Section 6.3 outlines variations in customer response to LBS; noting both proactive and reactive forms of LBS and other factors that mediate LBS response; LBS attributes, situational decision-making and brand familiarity. Nest, Section 6.4 introduces the conceptual framework emerging from this study followed by a chapter summary discussion in Section 6.5.

6.1 Current LBS Awareness and Varied Experience levels in UK context

It was noted from literature (see Junglas and Watson, 2008; Persaud et al., 2012) that LBS is an emerging aspect of marketing theory and practice current levels of awareness were not clearly identified. Studies (e.g. Mir, 2011) conducted outside the UK concur on this finding- that of low levels of LBS awareness and adoption. While there has been limited research on LBS adoption (see Sheng et al., 2008; Zhou, 2011; Neuhofer, 2012); some sector studies (e.g. e-Marketer, 2017)

note how LBS has the capacity to provide consumers with more opportunities to access services in more relevant ways (e.g. accessing LBS 'on the go'). In this study, therefore, one focus was to establish current LBS awareness levels and experience in the UK. Findings from the Observation phase point to high levels of awareness but varied levels of engagement with LBS. The finding on awareness was contrary to that of Junglas and Watson, (2008). Respondents familiar with LBS recounted vivid LBS encounters, exact brands used (e.g. Apple and Android) and location (s) at which these services were used (e.g. geotagging, navigation, 'checking in' using Foursquare and use of apps). For others, limited engagement with LBS was evident, in spite of relatively high levels of awareness of location services; such users chose only basic telephony functions (e.g. making calls) and interest-specific LBS. This selectivity in engagement echoes the work of Hang et al., (2012) that LBS are contingent on user related factors (e.g. interests influencing mobile web usage).

6.2 Individual Attributes that Mediate Customer Response

Findings showed that many attributes were influential on LBS response. These break down into person-specific factors, individual orientation and e-lifestyle.

6.2.1 Person Specific Factors

Results from phase one and two of this study on the role of personal factors are somewhat different from extant studies. For example, Perks (2012), Abeele et al., (2014) and King (2016) highlighted how only younger consumers were perceived to be more inclined to use new mobile based services than their older counterparts. Weiss (2013) focused on teenage adoption of technology; Louis and Wei (2000) expressed how young educated women tend to talk longer on the mobile phone whilst Wei and Lo (2006) and Lamarre et al., (2012) highlighted the mediating role of age and gender in consumer response. This study went beyond reported mobile device adoption concentrating specifically on LBS and actual consumer response (as in Phase two scenarios). Lifestage was one of themes explored in this PhD mapping out various response pathways for three distinct LBS user groups (young students, young professionals and mature groups).

In the UK specific findings from this research, no significant gender or age variations in consumer response were directly observed. In this study, both young and old groups had relatively high levels of awareness and experience using mobile devices and LBS and no clear link between personal factors (age, gender) and consumer response emerged. There were instances where younger respondents were mostly interested in pleasure or shopping related LBS whilst their older counterparts preferred mostly work-related LBS. This led to patterns where potentially younger respondents might be more inclined to use reactive LBS, but this appeared to link to individual interests rather than age or gender. In line with contemporary literature on 'transumers' (Galletley, 2016) this study has demonstrated how individuals with a defined digital footprint (both young and old) seek services on the go- uniqueness seems perhaps more linked to lifestyle elements.

6.2.2 Individual Orientation

A second group of factors that seemed to drive variation in response can be described as individual orientation- this includes attitudinal factors, individual use of multiway devices and e-lifestyles.

6.2.2.1 Attitudinal factors in LBS Encounters

As expected with all new services, there were some attitudinal challenges when consumers receive LBS: illustrating the need to know why, how and when consumers use or respond to LBS. We have seen in literature (Gronroos, 2010, p.11) how consumers are more discerning, seek better value. In addition, discerning consumers also expect less trouble when using services. In this study, some consumers were sensitive to receipt of automatic (reactive LBS of a referencing nature that track users) and unwanted LBS that tap into individual lifestyles. This result is in line with literature (e.g. Zhou, Lu, and Wang, 2010; Yousif, 2012) highlighting user concerns as well as general reluctance to receive unwanted messages. When thinking of traditional lifestyles and values scales (e.g. AIO and VALS); their applicability may be limited here: new devices (smart) and novel services (e.g. LBS apps) call for new thinking regarding behavioral response. More so, traditional lifestyle scales (e.g. AIO) focus on things of interest (chosen voluntarily). In contrast, contemporary activities (i.e. *'checking in')* point to unique emerging lifestyles such as accessing or receiving LBS may also include irrelevant services: not necessarily interest based (Xu and Gupta, 2009). In addition, these location services are not static: access anywhere, anytime subject

to connectivity. There is potency in knowing where and when consumers want to be reached as noted by Gronroos (2010).

Other consumers expressed fears over the harvesting of personal information and transaction risk which can be allayed through informed consent as well as providing opt-in and opt-out options for location tracking (as expected, Xu et al., 2010). For example, some respondents expressed concerns about adopting LBS. Therefore, there is relevance in understanding when, where and how consumers want to be reached, as users are more discerning. (Bellavista and Kupper 2012).

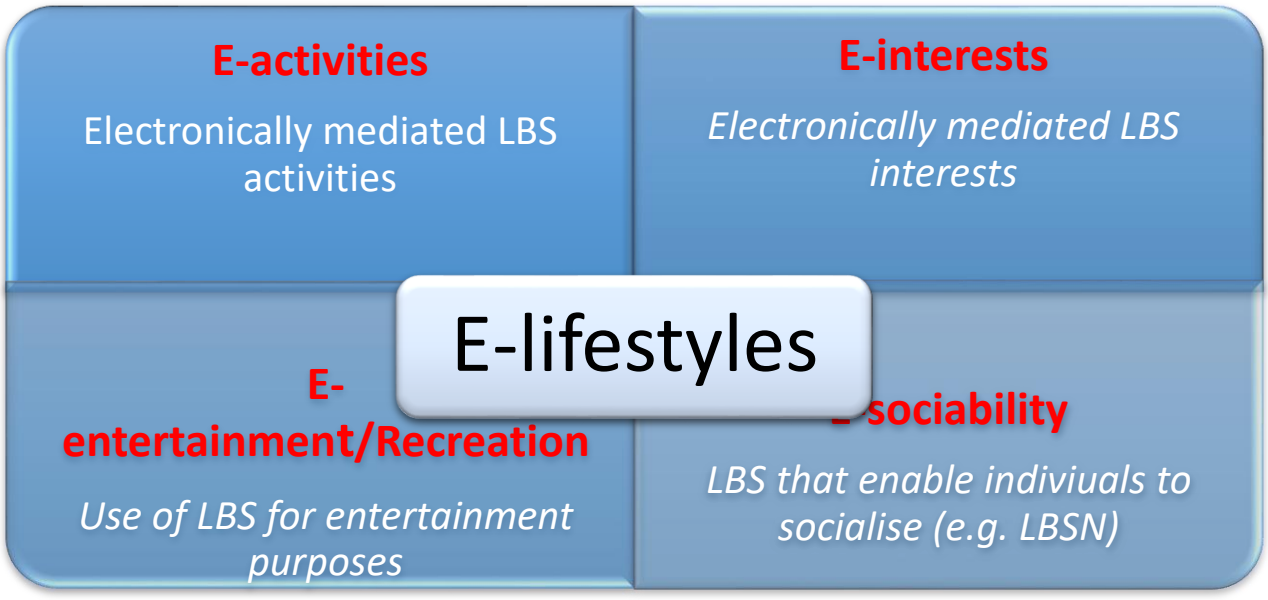
6.2.2.2 Exploring Multi-way use of mobile devices and emerging lifestyles

Relatively few studies have explored multi-way (multiple) use of mobile devices and the resulting lifestyles in consumer response (Zhou, 2012). Persaud and Azhar (2012) noted how the mobile device has become central to people's lives; and an extension of one's personality. Similarly, Strom et al., (2014) sees how mobile devices have become an extension of consumers shopping behavior: individual users now transition from one device to the other (from desktop to PC; from PC to mobile). Through online observation in this study, evidence of multi-way device use emerged, pointing to high awareness and engagement levels amongst LBS users. Multi-way device was different to regular mobile device use (e.g. mainly making and receiving calls- see Varnali and Toker, 2010). For example, there was use of multiple devices (e.g. TomTom navigation system and mobile phones) to navigate, search and access location services across various platforms. Multiple devices were also used to coordinate activities (e.g. personal diary and travel logs) as found in the work of Antheunis and Schouten, (2014). Furthermore, LBS users in this study wish to stay connected all the time, echoing the findings of Ahmad et al. (2010) and used aggregated apps. This study has extended previous research on multi-way use of devices (Persaud and Azhar, 2012) by identifying mobile devices are centers for LBS; GPS coordinates are used to conveniently provide context information (as also highlighted in Galletley, 2016) and are used in more complex, aggregated ways- with individual decisions on LBS response.

6.2.3 E-lifestyles

One of the objectives of phase 2 was to uncover how e-lifestyles influence individual consumer response. From the literature review, the impact of technology on consumers' daily lives is undisputed; Hur, Kim and Park (2010, p.302) has acknowledged the mediating role of lifestyle in most consumer purchase and usage decisions. This assertion of the role of lifestyle is congruent with foundations of early lifestyle studies (e.g. Lazer, 1963; Wells and Tigert, 1971; Plummer, 1974; Gutman, 1982; Mitchell, 1983). At present, however, the efficacy of traditional lifestyle scales in measuring emerging lifestyles impacted by developments in technology is heavily debated (see Le et al., 2009; Yu, 2011). Previous studies (e.g. Yu, 2011) relied on reported behavior by asking respondents to report e-lifestyles based on predetermined measurement scales. Emerging lifestyles are, arguably, distinct from traditional lifestyles enshrined in scales such as the AIO, VALS and LOV that predominantly reflect offline behaviour. This study extended previous research (e.g. Yu, 2011) by using simulated LBS scenarios (cartoon tests) based on contemporary and popular LBS: showing current lifestyles of residents in the Midlands area of UK (See Figure 9.2). This provided rich insights on actual respondent e-lifestyles as opposed to reported (past) ways of living.

Figure 6. 1: E-lifestyle Elements



Source: This Study

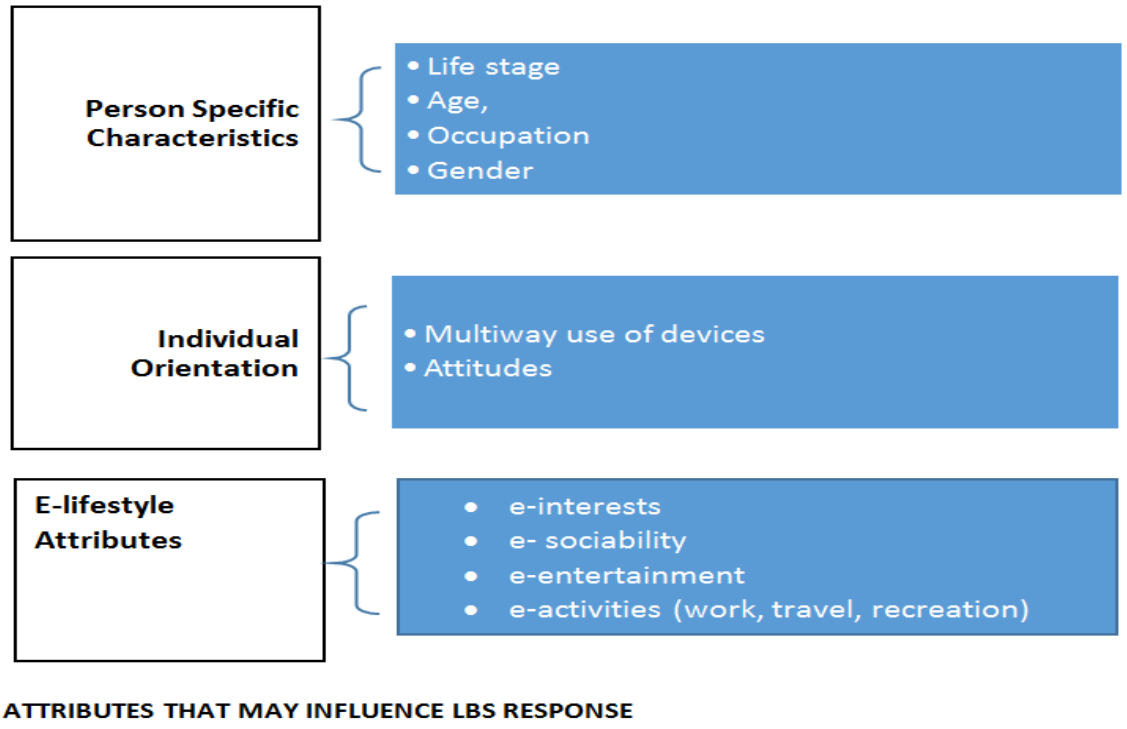
In the observations in Phase 1, it was clear that the central role of mobile devices in coordinating daily activities, accessing and responding to services 'on the go' was facilitated by LBS. In Phase two, responses to depicted LBS scenarios (specialist interviews) suggested individual lifestyle response when contemporary LBS scenarios were presented. Findings show how four interrelated e-lifestyle factors influence individual response (see Figure 6.1). For example, the role of e-activities was evident in phase two findings: *"I'm always on the road [laughs]. I do everything online and travelling I don't have to stop and look at a map. Otherwise I'll get lost [laughs]."* Here, respondents actively and routinely use LBS to conduct daily activities; potential for positive response to LBS received 'on the go'. In contrast, other respondents were indifferent to irrelevant LBS that did not match individual lifestyles. The role of e-lifestyles on individual response was also confirmed in phase three findings: *"Yeah, yeah I think they aid my lifestyle…because I'm so busy, just information you find it more accessible it's at hand… it does support my lifestyle…if I reach where there is free Wi-Fi, I check –in.* Respondents expressed interests in fuzzy deals, health and dieting apps (young professionals); nearby restaurants and directions (Older Group). Some younger respondents (students) expressed willingness to receive recreational and social location services for example when on vacation (checking in abroad and then posting a picture on social media). Use of e- entertainment based LBS was evident in a minority of respondents, who routinely use location enabled games (e.g. Pokemon Go). It is evident from these findings how tailored location services meshing with individual lifestyles (e-lifestyles) are likely to be positively received (e.g. those addressing individual activities and interests, social and entertainment needs).

These results are consistent with earlier studies on e-lifestyles. For example, Karnowski and Jandura (2014) observed new usage patterns and user styles (clusters e.g. 'mostly at home', 'on their way' and 'hanging out with friends') based on different user contexts. In addition, Ahmad et al., (2010) and Caddy (2016) referred to a new breed of consumers (*'transumers'/ 'instaviduals'*) who seek access to services 'on the go'- this constant mobility emerged strongly in the findings in this study- evident in multiple devices to coordinate activities, noted as *'in between time and places of transit'* by Zhang et al., (2012*).*

6.2.3 Framing Individual Attributes - E-lifestyles

When reflecting upon findings of this study, we can visualize the interplay between e-lifestyle factors and individual attributes. Findings from this study indicated how many participants would respond positively to LBS that meshed well with their lifestyles. Respondent narratives demonstrated how e- activities, e-interests, e-sociability and e-entertainment[3] (see Figure 6.1) had a link to their response. This study has taken a focused approach exploring attitudinal challenges for UK consumers exposed to LBS, the use of multiway devices and how that shapes LBS use patterns and the important role of e-lifestyles. When considering some attitudinal concerns about unwanted LBS, what has emerged are potential trade-offs between maintaining e-lifestyles and providing privileged access to personal information (Varnali and Toker 2010).

Figure 6.2: Attributes that influence LBS Response



Source: This Study

[3] Distinct from traditional lifestyles (e.g. routine engagement in offline activities such as offline shopping, sports; AIO) to e-lifestyles (e.g. online shopping, socializing and entertainment in transit/between places; adapted e-lifestyle [e-Activities, e-Interests, e-Opinions).

When thinking about LBS and customer response, we have seen the interplay of three key factors personal factors, individual orientation and e-lifestyle attributes (See Figure 6.2). Consumers acknowledges how LBS could reduce search costs and noted routine access through LBS helped support their search for value. Positive attitudes towards responding to LBS (present and future) in various contexts (search and navigation, communication, shopping and entertainment) emerged, but as noted in the pilot testing for phase two, LBS stimuli incongruent with individual e-lifestyles and needs generated negative response. Findings pointed to positive attitudes towards contextualized services offering convenience; more discerning respondents seeking easy access to LBS 'on the go.' Therefore, contextualized LBS that mesh with individual lifestyles (e-activities, e-interests, e-sociability and e-entertainment) are more likely to be positively received. We have also identified the likelihood of different response pathways based on different individual e-lifestyles. Therefore, there is need to highlight these variations in customer response in section 6.3.

6.2.4 Customer Response Pathways

Different LBS response pathways emerged from the findings (see Figure 6.3). Immediate response is when a consumer straight away responds to LBS upon receipt. Socially Influenced response refers to decisions to respond or not to respond that are affected by peer opinions (e.g. friends and family). Delayed response is when consumers do not straightaway act upon receipt of an LBS. Indifferent response is clearly where a user does not feel inclined to respond to any LBS offer.

As per findings of this study, immediate response was the least adopted response pathway. This is mostly evident in phase two where a minority of older respondents indicated readiness to respond to LBS valid for a relatively shorter period (e.g. day). Secondly, some older participants reported how they would respond to LBS that facilitated caller identification (e.g. True Caller), service/utility identification (e.g., information search) and work related (e.g. locating cash points for someone responsible for identifying new sites to install cash machines).

Interestingly, some participants reported how social influence plays a significant role on response. This is evident in phase two where some participants responded immediately to recreational LBS (e.g. meeting the 2016 Football champions) that helped them to gain social acceptance. Findings indicated that some LBS received in the presence of others may result in r immediate response

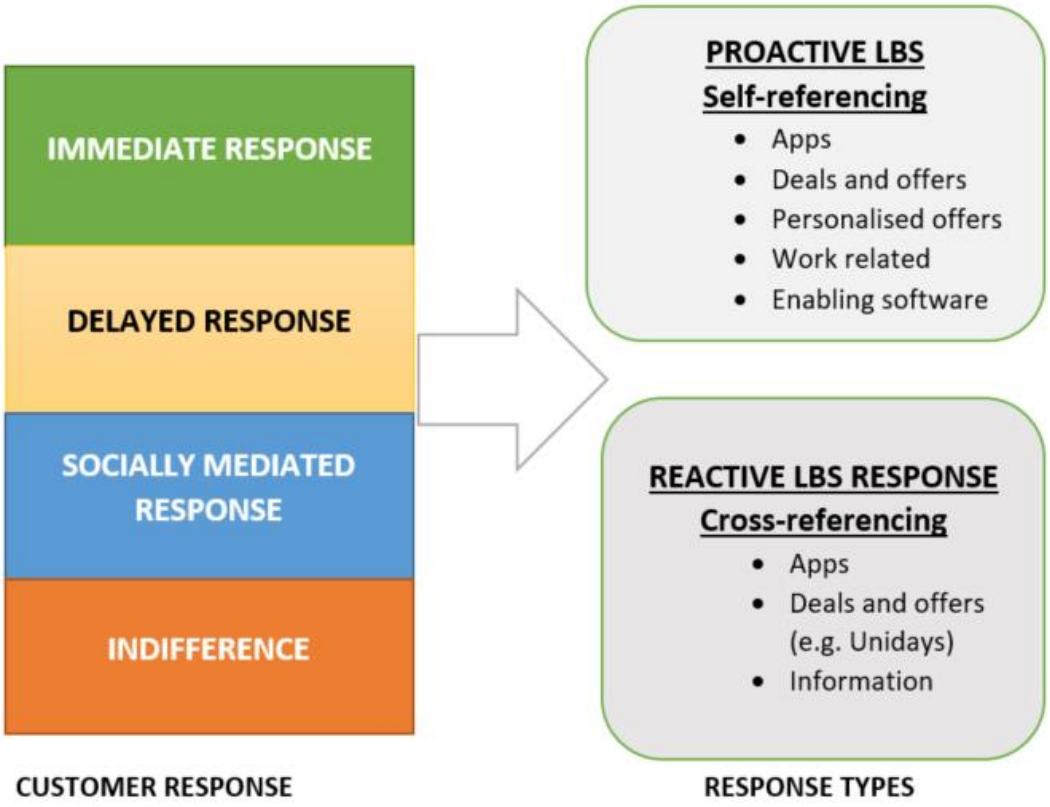
where recipients perceive value benefits as well as benefiting the entire group. Similarly, where young individuals use social media to access LBS, there is potential that responses will be influenced by group dynamics. Thus, if the location service is congruent with interests of various group members, this may result in immediate response. Such socially influenced response was an interesting pattern to emerge in the findings

Delayed response mostly occurred due to future dated offers (valid for a week or month as opposed to a shorter time e.g. for the day). In addition, results indicated how some discerning consumers take time to validate offers (comparing the scale of savings to be made- 'showrooming'). This was evident mostly with the young mobile savvy group (i.e. students) who engaged in considerable online activities. This young group took time to compare location services presented by different retailers' in order to check the value of LBS. Similarly, some older participants delayed response, seeking further research on offers. Secondly, some older participants were skeptical of LBS; cautious of unplanned purchases as reported in the findings. Interestingly, it was not just post-dated LBS services/offers that were subject to delayed response. This was evident across groups (young students, young professionals and the older) who regardless of the duration/nature of LBS, delayed response to a later time. When we think of delayed responses, this was mainly for reactive LBS of a cross-referencing nature (e.g. deals and generic location information); older participants who needed time to consider (research) the location related messages that they received. Therefore, delayed response is evident across all groups.

Many participants were indifferent to random LBS of a reactive nature such as deals and offers. Thus, individual indifference explores how participant responded negatively to LBS. This is evident in all three phases of this research. In Phase 1 of the study, we observed how some participants were concerned about trust and data misuse or how personal details were going to be used as well as transaction security leading to negative sentiments towards any location services. Somewhat surprising, the indifference occurred mainly with low value LBS such as 10 % off deals as well anon-monetary offers (e.g. Carnival and Leicester City celebrity event). Similarly, in phase two there was evidence of individual indifference where some participants ignored unfamiliar brands while yet others were indifferent to intrusive (unsolicited- reactive) LBS of a cross-referencing nature. Thus, random LBS may not be trusted by individuals concerned about risk (e.g. transaction). Individual indifference towards reactive LBS was also evident amongst some older

participants who preferred proactive location services; would not respond to messages even if they would be actively shopping at the time. For many participants, personalization appears to be a key to response (e.g. immediate or delayed). Respondents appear more willing to receive personalized LBS that mesh with their needs, as noted when young professionals expressed willingness to receive personalized LBS that addresses individual needs. Thus, it was evident from respondent narratives that proactive LBS of a self-referencing nature (e.g. requesting for information on available parking) is more well received than other forms of LBS messages.

Figure 6. 3: Outline of Customer Response Pathway



Source: This Study

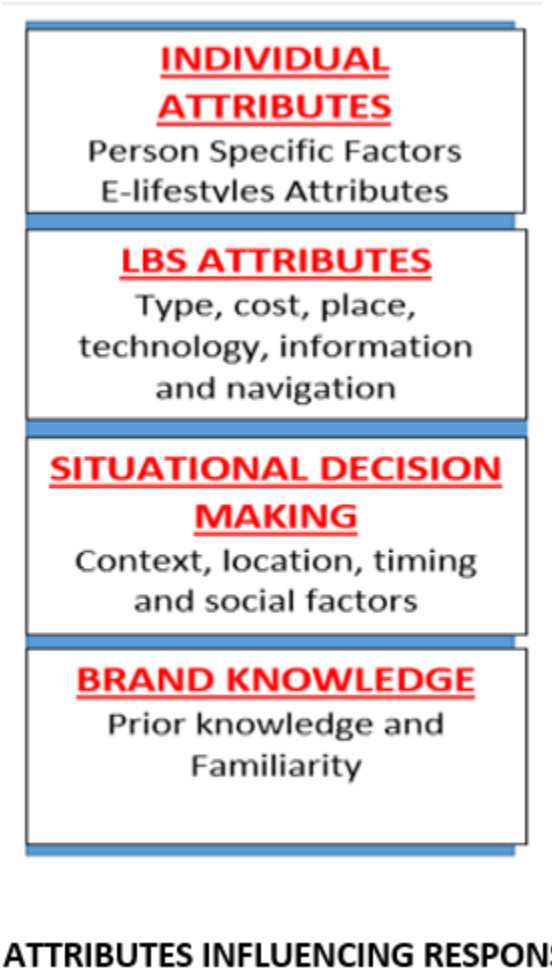
Findings from this study have articulated key response pathways amongst groups; immediate response, socially mediated influence, delayed response and indifference. Thus, this study has

broken down response into specific pathways as reported by participants: going beyond response and non-response. When we look at previous studies (e.g. Venkatesh et al., 2003; Zhou, 2012) the general focus was on consumer attitudes towards LBS. For example, aforementioned studies used retrospective measures: far from accurate. In addition, more recent studies (see Harwood and Garry, 2017; Grundy et al., 2017) focused on antecedents to consumer response in techno-service systems (e.g. IOT and mobile health contexts). Therefore, this PhD study goes beyond antecedents, response and non-response focusing instead on identifying specific response pathways in typical LBS encounters. This study extends previous adoption studies and adds typical/projected response process via specialist scenarios (reflective) to map response pathways. Thus, this research extends previous studies by adding fresh insights on four typical response pathways in a UK context (see page 217). In addition, classification of response type (reactive and proactive- beyond Bellavista and Kupper, 2012) as well as corresponding response types. Thus, providing links to future studies in various contexts (e.g. Big Data and Urban Development - Thakuriah et al., 2017 and Advertising in new media and the presence of cultural values- Czarnecka et al., 2018). Therefore, findings from this PhD on consumer response pathways can provide much needed insight into typical response pathways in various contexts. In conclusion, this study has highlighted the multidimensionality of consumer response. The next section presents factors influencing variations in customer response pathways to LBS.

6.3 Factors influencing variation in Customer Response Pathways for LBS

In Section 6.2, the individual attributes that might influence LBS response to emerge in the findings were identified. This section outlines factors other than individual attributes that appear to influence response to LBS (LBS attributes, situation decision making and brand knowledge).

Figure 6.4: Framework of attributes that influence LBS Response



Source: This Study

We have seen in Figure 6.4 how four key factors influencing customer response in typical LBS encounters. That is individual attributes, LBS attributes, situational decision making (context) and brand knowledge. Therefore, the specific customer response pathways (e.g. immediate response, socially mediated response or indifference) depend on the interplay of these factors as shown in Figure 6.5.

6.3.1 LBS Attributes

Previous literature (e.g. Venkatesh et al., 2003; Viscusi et al., 2011; Zhou, 2012) provided a snapshot of consumer response to innovation (e.g. mobile marketing). In these studies, either a technological perspective (e.g. acceptance of technology) or a rational decision-making stance (e.g. perceived ease of use and perceived usefulness) was taken. At the same time, earlier research tended to rely on internal determinants and retrospective accounts of individual responses, which, according to Lu et al, (2005), lacked predictability. This research took a different perspective, capturing actual consumer experiences in simulated LBS encounters; closely mirroring actual consumer response pathways.

In this research, some different response pathways emerged from the research findings based on the type of LBS and associated costs. We saw, in the observations, a willingness to respond to socially-linked LBS that echoed individual interests. In phase two, some young professionals indicated they would be more inclined to respondent to LBS offering significant lifestyle value (health, navigation/location LBS or travel based LBS (i.e. type) or immediate monetary value - (e.g. money off deals and free apps- young students). Others saw value in location sharing apps. Some positive attitudinal behavior towards work related LBS was evident – for information based apps that helped commuters. These findings demonstrate a need to understand individual motives for using LBS (e.g. type, cost and information needs). Results of this study highlighted four response pathways: immediate use, delayed/future response, collective social action (social influence) and indifference. Contradictory perspectives and decision making emerged: majority of respondents went beyond 'exposure' to 'checking' stage but exposure to LBS was not a guarantee for positive response; evaluation can also be subconscious. Participants responded differently to short term offers (valid for a day or week versus a month): they checked links to LBS value (savings to be made) and they were influenced by situational decision making (e.g. timing). Therefore, at the exposure stage, the decision-making process is more involving and complex across all buying categories (e.g. food and clothing). Nonetheless, where respondents perceived low value of location services (e.g. insignificant savings), response was slower.

6.3.2 Situational Decision Making

The pivotal role of situational decision making has been highlighted by Zhang et al. (2012) in past studies. Findings from this research indicated the influence of situational decision making in LBS use. Respondents expressed willingness to receive LBS when actively searching for services or travelling in unfamiliar places. Rich narratives of situations/contexts where individuals prefer to be reached with relevant LBS emerged and these highlighted lifestage considerations. Student participants indicated willingness to receive location services when actively shopping, while young professionals indicated willingness to receive tailored LBS when travelling; mature participants were receptive to personalized LBS (proactive e.g. work related) location services that helped in reducing search costs. Thus, contextualized LBS (e.g. emergency, food and travel/transport; both proactive and reactive) that help address individual needs as well as reduce search costs had positive attitudinal impact (this reinforces the findings of Pescher, Reichhart, Spann, 2014; Ballaben, 2016). LBS that reached respondents in a timely way – at time of their search was regarded positively- e.g. response to food related location services received whilst searching for food places (timing). For example, participants passing through Nandos during lunch time perceived value in reduced search costs. In addition, context was also important; other respondents indicated willingness to receive contextualized location services when hungry. Nonetheless, other respondents were indifferent to irrelevant and ill-timed LBS. Certain low value location services received in the middle of doing something (e.g. a scheduled podcast or listening to the radio) are not well received. If the LBS messages were perceived to be of value or interest, the (negative) impact of mistimed LBS was less (or defused). Secondly, LBS alerts for student deals (UNIDAYS) received when one is doing something else were well received if these matched individual interests. Thus, situational decision-making influences individual response hence the need to deliver contextualized services.

Situational decision making on the move requires a more complex form of LBS - establishing interests that are time and location dependent could be challenging. For example, it is difficult to know the situational decision making for *'transumers'* who rely on apps for access convenience as they seek services meshing with individual lifestyles (e-Interests, e-Interests and e-Values). If relying on traditional lifestyle scales (e.g. AIO and VALS), the efficacy of predicting and providing contextualized LBS services (i.e. time and location dependent) is questionable (Yu,

2011; Yu et al., 2015). Therefore, these findings highlight the need to acknowledge the pivotal role of emerging lifestyles (adapted e-lifestyles, Yu, 2011) and situational decision making in individual consumer responses to LBS.

The potency of contextualization is observed by Donovan (2013) who noted a marketer's challenge as the ability to know how consumers engage with mobile services and how to tailor appropriate strategies. This taps into an older literature on situational context in consumer behavior (Belk, 1975) on situations; Dholakia and Dholakia (2004) on different roles played by individuals' contingent in location; Banerjee et al., (2008) concentrated on private versus public locations; and Karnowski and Jandura (2014) identified three mobile clusters based on location. This research takes situational context further by a) providing scenarios that help to depict exact situations in typical LBS encounters and b) providing context(s) in which LBS is received (e.g. in transit). In addition, the varied focus groups insights showed typical situational impact. Rather than as, Zhang et al., (2012) and Karnowski and Jandura (2014) who proposed a model looking at the role of physical space, this study explored broader situational contexts specific to emerging lifestyles and contemporary LBS use. The focus extended beyond the physical locations to timing and role of social factors (e.g. social influence).

6.3.3 Potential Influence of Brand Knowledge

Some surprising results emerged. The study was not designed to look at brand elements- it was primarily exploring consumer response generally to LBS messages and services. Brand knowledge emerged as one indicator of how well some LBS messages were received. Following on from exploratory phases of this study, phase 3 sought deeper insights into the exact role of (prior) branding knowledge in motivating consumer response. Smit, Bronner, Tolboom (2007) refer to the importance of *'consumer-brand relationship' or 'brand relationship'*. This is when consumers and brands can relate to each other and this brand metaphor stems from personality and social psychology research focusing on person to person relationships (De Wulf et al., 2001, cited in Smit et al., 2007, p.627). Consumers differ based on their perception of brands as well as how they relate to these (Muniz and O'Guinn, 2001); others develop an attachment to brands such that to the extent of developing an emotional relationship with these (Bouhlel, Mzoughi, Hadiji and Slimane, 2011). In this study, the potential role of brand knowledge in influencing consumer

response was explored. In analyzing the role of brand knowledge in individual response, the research was informed by Keller (2003) dimensions of brand knowledge. These are brand awareness based on previous use or exposure; strong brand knowledge is perceived to lead to strong brand recall and recognition. Brand image associations may infer implied benefits or attributes which in turn generate positive or negative attitudes. Results of this study indicated that most respondents were motivated to respond to familiar brands: role of brand knowledge (e.g. name, image, added value and authenticity) in current and future LBS responses. This was evident from the first phase of this study where early signs of brand orientation in individual responses emerged. For example, there were specific responses based on the type of brand (e.g. Android resulting in positive response and somewhat negative attitudes towards IOS -Apple). In addition, some respondents indicated that response in LBS encounters was contingent on the type of mobile device owned (brands e.g. Nokia). In subsequent phases (e.g. phase three) prior brand knowledge was evident in respondent narratives where brand image was a key factor in decision making; LBS with well-known brands were well received and most likely to receive attention. Thus, when confronted with location services, most respondents checked for brand indicators before deciding. Secondly, when responding to location services, some respondents judged the likely LBS performance of a brand based on previous experience (familiarity) with a brand.

The preceding statement highlights the role of brand knowledge (e.g. added value) where a well-known brand is perceived to connote performance (i.e. of the LBS) as well as the quality of the location service. Respondents could identify both high end (e.g. Gucci) and medium to low end (e.g. Matalan) LBS linked to specific brand names. Brand knowledge appeared to be an indicator of LBS delivery expectations but the findings were not conclusive on this. Whilst some respondents (minority) were indifferent towards brands, brand knowledge was important in influencing individual response to LBS, this was true of all groups. Respondent beliefs about value for money delivered by known brands led to the idea that brand knowledge was a sign of authenticity for some LBS services. However, this was just one mentioned factor and there was not time to explore this in further depth.

6.4 Conceptual Overview of e-lifestyles and Customer Response to LBS

Findings from this study have articulated key response pathways: immediate response; socially influenced response, delayed response and indifferent response. Previous sections in this discussion have broken down response into specific pathways as reported by participants and have identified key influences on that response. Based on overall findings from this study, a final conceptual framework has been developed which brings together factors influencing response (personal factors, LBS attributes, situational decision making and brand knowledge) and consumer response patterns. Overall, LBS that delivers value (e.g. convenience: making search tasks easier, making payments, locating places,) is well received. Generally, where LBS are perceived to reduce search costs, this was positively received and usually resulted in immediate or delayed response. When considering the nature of consumer response, we saw how life stage, consumer trust and brand knowledge influence response pathways. As expected with most new services, there were consumer trust (risk) concerns over possible misuse of personal details as well as transaction risk and skepticism towards location services. Such results are congruent with mobile adoption literature (e.g. Kleijnen, 2007 and Abeele et al., 2014) highlighting contrasting perceptions where services are delivered using personal devices.

This study extended Xu et al., (2011) study by adopting a more focused approach on selected LBS stimuli and scenarios (using cartoon tests exhibits) thus mapping typical response in typical encounters. Therefore, in this study, it was possible to identity two response types; reactive and proactive LBS response (random LBS sent to an LBS user based on coordinates of the mobile device OR self-initiated/selected LBS). Discussion in Section 6.1, 6.2 and 6.3 have also linked these two types of response to individual profiles and contexts. When considering factors that influence whether customer response might be reactive or proactive, we have seen in Section 6.3.1 how individual attributes may influence response pathways, while in Section 6.3.2- 6.3.3, other influencing factors have been identified as significant (situational decision making and brand knowledge).

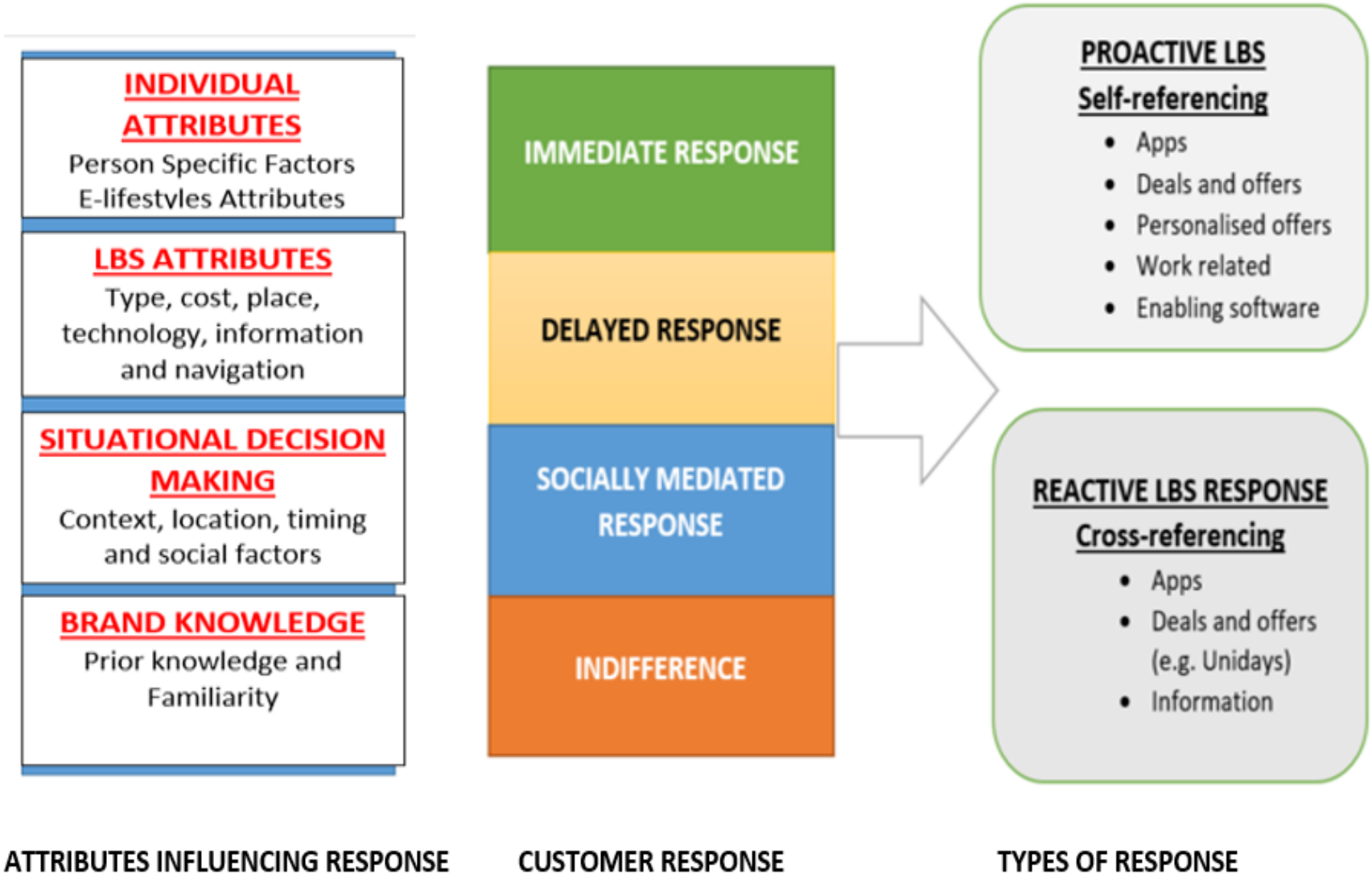


Figure 6 5: Final Conceptual Framework of Consumer Perception and Response
Source: This Study

While previous studies (e.g. Yu, 2011; Zhou, 2012) have focused separately on either lifestyle or LBS, this research adopted a synchronous approach (addressing both LBS and e-lifestyle in a single study) in line with recommendations by Weiss (2013). Based on insights gleaned on the nature of both individual attributes, LBS attributes, situational decision-making and prior brand knowledge, the framework outlines what appear, from this research to be important influencing factors on consumer response to LBS.

6.5 Summary

This study has provided deeper insights into individual response to LBS, highlighting the role of e-lifestyles and specific consumer response pathways. Four summary points emerge

- High levels of LBS awareness but varied levels of engagement were evident. Engagement was linked to some extent to multi-way device use for coordinating activities across groups; connectivity being key for actions such as *'checking in'.*
- Some complex usage patterns emerged, suggesting unique decision pathways in LBS response. Brand knowledge appeared to be an indicator of LBS acceptability in some contexts.
- The mediating role of lifestyle in most consumer LBS encounters was evident. Evidence of 'actual' participant e-lifestyle based on simulated LBS scenarios emerged. Some attitudinal challenges meant that trade-offs had to be made; LBS needs to be congruent with individual lifestyles to be accepted.
- Results highlighted the role of situational decision making and LBS response was seen to depend on many contextual factors. As expected with novel services especially mobile based, trust and transaction concerns were expressed hence call for opt-in, op-out and personalization.

Based on the above patterns, a conceptual framework (see Figure 6.5) has been developed that summarizes the factors influencing consumer response to LBS.

Chapter 7

Conclusion and Contribution of Study

7.0 Introduction

This chapter offers conclusions to the study and identifies contributions to theory and practice, while also highlighting limitations and future research directions. Section 7.1 provides a study overview and an outline of how research objectives were met. Section 7.2 presents theoretical contributions of this study followed by methodological contributions in Section 7.3. Next, implications of research results are presented in section 7.4 followed by research limitations in section 7.5. Lastly, section 7.6 reports on future research directions.

7.1 Study Overview, Research Objectives and Questions Outline

We have seen how the nature of LBS is such that access to user details is necessary to enable delivery of tailored services to consumers (e.g. location coordinates via mobile devices). Thus, trade-offs to be made: consumers provide privileged access in return for tailored LBS. This research was conducted to explore consumer attitudes towards LBS as well as identifying the role of emerging lifestyles (consumer lifestyle and mobile lifestyle) in influencing behavioural responses. As such this study sought answers to the following research questions:

a) What are current UK consumer attitudes and familiarity towards Location Based Services?

b) What is the range of LBS experience across different customer groups?

c) What role, if any, do lifestyles and situational context have on individual consumer response to LBS?

d) How do consumers respond in typical LBS encounters?

e) What individual characteristics might link to individual behavioral response towards LBS (e.g. perceptions of value and risk, life stage and family life cycles etc.)?

The research objectives guiding this study are:

1. To investigate consumer familiarity and attitudes towards UK location based services.
2. To explore current UK consumer experiences with location-based services.
3. To uncover how e-lifestyles and situational context may influence individual consumer response to LBS.
4. To investigate actual consumer response patterns in LBS encounters.
5. To examine how respondent perceptions (value and risk) and individual factors (e.g. life stage and family life cycles) influence consumer response to LBS.

The study was guided by these questions and objectives: conclusions of the study will be drawn by revisiting the objectives and relating these to study results. Therefore, section 7.1.1 to section 7.1.5 examines how the research objectives have been met.

7.1.1 To investigate consumer familiarity and attitudes towards location based services in the UK.

To address this objective, exploratory research on LBS was conducted (see Literature Review chapter) followed by non-participant online observation of select LBS communities. Thus, this study provided a thorough review and critic of LBS and lifestyle literature exploring different strands of thought on location services. For example, types of LBS used, reported awareness of location services and analysis of LBS theories. LBS are clearly becoming more sophisticated and contextual in nature credit to agile technologies (e.g. GPS and 4G) that are transforming the LBS landscape. Three user groups emerged from this study (see Findings chapter section 5.1.1) each with different awareness and experiences with location services. Thus, the first group (Involved approach) appear highly engaged in areas such as complex device usage; experience. The second group (observer approach) had good awareness of LBS but was very disruptive. The last group (transaction approach) had limited awareness with LBS but positively engaged. Key conclusions from this research are that most respondents are highly aware and receptive to LBS (contrary to Junglas and Watson, 2008) but there is selective engagement. In addition, new ways of using LBS such as Foursquare and ‘checking in’ also emerged showing how LBS has developed since early versions noted by Rao et al.,(2003).

7.1.2 To explore initial consumer experiences with LBS.

This objective was also part of Phase 1 of the study hence initial consumer experiences with LBS were reported based on results from non-participant online observations. Online observations provided valuable insights on current experiences helping to identify examples of location services currently used. While this study observed high levels of awareness (see section 7.1.1), there was selective engagement in some instances due to a need for LBS to mesh with individual needs and lifestyles. For example, some participants indicated how they always rely on LBS to find places of interest. Secondly, others expressed how they notify friends of their physical location when interacting with recreational activities (e.g. 'checking in' at a Mardi Gras parade). Therefore, those who used location services expressed how such usage has become routine when coordinating daily tasks. Here, emerging insights on user lifestyles were gleaned where 'checking in' to places of interest (e.g. Foursquare) was a regular practice. Also evident in this study was multi-way device and platform use which indicates high engagement with location services which mesh with individual interests.

Nevertheless, where participants had preference for basic mobile phone use, this resulted in limited engagement with LBS. For example, irrelevant and unwanted services: not necessarily interest based (Persaud et al., 2012) were negatively received. However, it was apparent at this stage of the research, that a large body of participants were highly experienced with LBS ranging from utilitarian (e.g. navigation) to hedonic (e.g. socialisation). Thus, results of this study reiterate the central function of LBS in supporting consumer shopping behaviour (as expected, Strom et al., 2014). Therefore, key insights about individual experiences are:

- Variations in LBS use as engagement was based on degree of match between individual interests and location services.
- Multi-way device (e.g. smart phone and navigation equipment) and platform use (e.g. Foursquare and Instagram).
- Contingent on the location services presented (e.g. reactive LBS) or requested (e.g. proactive) LBS must match individual interests.
- Initial signs of changing consumer lifestyle (from traditional to emerging mobile/e-lifestyles) where mobile devices have become central to daily life.

In summary, we have seen how the mobile device has become central to consumers' lives at a time of increasing growth in agile technologies, in line with Strom et al., (2014).

7.1.3 To uncover how e-lifestyles and situational context may influence individual consumer response to LBS.

One of the objectives of this study was to glean deeper insights into the potential influence of e-lifestyles and situational context on individual consumer responses. We outlined emerging insights of e-lifestyles in Phase 1 of the study (section 7.1.3) as well as some early indication of contextual variations in response. Therefore, Phase 2 of this study explored these insights further using specialist in-depth interviews to determine how e-lifestyles and situational decision-making influence individual consumer response in LBS encounters using cartoon tests unlike previous studies e.g. Yu, (2011), Karnowski and Jandura (2014) and Yu, Li and Chantatub (2015). In this study, it was interesting to note how e-lifestyle and situational context influences response to LBS. Some respondents in Phase 2 expressed how mobile devices and apps are central to coordinating daily lives (tasks e.g. accessing services, communicating and travelling). Thus, mobile devices have become extensions of individual behaviour and personality based on how these are frequently used. There was also evidence of multiple device use when coordinating exacting daily tasks. For example, some participants boasted of switching between devices for various activities of interest which support individual lifestyles. Therefore, value is placed on connectivity hence mobile devices and apps become the default means for coordinating daily activities. In addition, some participants indicated how they rely on routine use of location based services due to the nature of their jobs. Here, location services that support work lifestyle are positively received with predispositions to respond in similar ways in future LBS encounters.

Apart from work related location services, other participants would positively respond to communication, food, gaming, shopping and travel LBS meshing with individual lifestyles. For example, communication related LBS enabling individuals to routinely communicate between physical locations and time. Findings also highlighted how the timing of LBS is important. For example, where a customer receives a food or clothing related location service message when passing through a shop or when actively seeking such services (as expected Karnowski and Jandura, 2014). Some respondents also expressed how they are likely to positively respond to specific LBS (e.g. food and entertainment) when in the company of friends. Others indicated preference for travel location services when on the move (wired lifestyles- Ahmad et al., 2010; Rao et al., 2014). There is positive attitudinal response to relevant and significant (value) LBS received at the right time and place. In conclusion, this

study provided a more specific understanding on e-lifestyles and the actual role of situational context which in this study is referred to as situational decision making.

7.1.4 To investigate actual consumer response patterns in LBS encounters.

One of the aims of Phase 2 (objective 4) was to map out actual consumer response patterns in typical LBS encounters. Unlike previous LBS and or e-lifestyle research relying on past accounts of consumer response (see Venkatesh et al., 2003; Viscusi et al., 2011; Zhou, 2012), Phase 2 captured consumer experiences in typical LBS encounters. Results pointed to four response pathways unique to this study which are immediate, delayed/future response, collective social action and indifference. Contradictory perspectives and decision paths emerged with a majority of participants indicating how they would respond immediately to short-term offers delivered at convenient times. Results of this study also point to complicated individual decision-making based on brand knowledge and life stage. For example, most respondents expressed willingness to respond to familiar brands and different response patterns also emerged between young and older groups. Most young participants responded immediately to shopping and pleasure based location services of a reactive nature. This contrasted with their older counterparts mostly inclined to respond immediately to work related location services of a proactive nature. Thus, both younger and older participants chose different response times or pathways based on the nature of LBS (reactive or proactive). In summary, this research has managed to identify typical response patterns in typical LBS encounters.

7.1.5 To examine how respondent perceptions (risk and value) and individual factors (e.g. life stage and family life cycles) influence consumer response to LBS.

Many studies on consumer perception about value and risk are located in new media marketing (e.g. mobile banking and mobile advertising- Xu et al., 2011; Zhou, 2012)., These tend to adopt privacy calculus lenses: privacy and risk implications for providing privileged access to personal and location related information. Thus, past research has extensively highlighted user reluctance to receive random marketing messages preferring instead personalised messages or services. Phase 3 and objective five of this study (focus groups) sought to further examine how respondent perceptions of value and risk influence individual response to location services.

The aim was to establish UK consumers' motivations for responding or not responding instead of simply recording either response rates or non-response as was the case in most extant studies (e.g. Xu et al., 2011).

In this study, most participants indicated willingness to receive LBS delivering unique value (e.g. convenience and cost savings). This selectivity (i.e. what is received and responded to) has already been explained (see sections 6.3 and 7.1.) and linked to life stage (e.g. perceptions of both young and older participants). For example, we have seen how older participants in the UK see value in proactive LBS delivering value in routine activities (e.g. apps- convenience). Secondly, younger participants were mostly motivated by LBS of a reactive nature (e.g. money off deals). Third, a minority of participants (both young and old) were concerned about privacy (e.g. possible misuse of personal information and non-delivery of LBS) in line with Kleijnen (2007) and Abeele et al., (2014). Furthermore, objective 5 sought to examine the exact role of individual factors in consumer response. We have already seen in section 7.1.4 how life stage affected response in typical LBS encounters. In addition,-response to LBS was also dependent on the type of LBS (reactive for younger participants and proactive mainly for their older counterparts) as well as how this meshes with individual lifestyles. Therefore, results from this study confirm that respondent risk (e.g. transaction), value perceptions and individual factors influence individual response.

7.2 Research Contributions

7.2.1 Contribution 1: Identifying Actual Consumer Response Process

This research extends the work of Venkatesh et al., (2003) and Zhou (2012) who researched consumer response patterns in typical LBS encounters using retrospective measures (see also Table 4.1 Research Design section 4.3.1). For example, we saw in page 98 of this study how theories such as UTAUT (Venkatesh et al., 2003) lacked predictability (see also Lu et al., 2005) into typical consumer response. Thus, at present extant theories (e.g. UTAUT) are inadequate in mapping consumer response at a time of agile technologies (See Gartner, 2014). In addition, future trends point to growth of internet of things (IOT) for example cyborgs (see Harwood and Garry, 2017), consumer response to mobile health LBS (e.g. fitness apps, see Grundy et al., 2017). Therefore, there is need to understand specific response pathways: going beyond response and non-response. This PhD provides a holistic account of specific response pathways

by tapping into individual experiences and narratives (actual consumer responses) expressed in open and more reflective ways via online observations and specialist interviews. As far as known, this study represents the first attempt to provide deeper insights on actual consumer response process in typical LBS encounters (e.g. the UK context). We observed how previous studies (Zhou, 2012- see Table 4.1 summarising key LBS studies and table 2 Methodology Chapter, overview of previous research designs), used retrospective measures thus generating reported accounts which might be far from accurate. In addition, Lee et al., (2014), in their study on lifestyles of slow food eaters mainly focused on individual motivations and lifestyles. Instead, this study enabled the researcher to identify different response pathways. Therefore, this study extends previous LBS adoption studies as well as adding fresh insights into typical response processes. Firstly, this study used specialist scenarios reflective of typical LBS encounters to map key response pathways. Thus, typical response pathways were mapped by capturing 'live' customer experiences of different forms of LBS and interrogating the rationale behind individual responses using LBS scenarios (via cartoon tests). As seen in the conceptual framework (Figure 6.5, Section 6.4), fresh insights emerged of four typical response pathways in a UK context (unlike previous studies conducted in either America or Asia e.g. Zhou, 2012). This adds more value in understanding in-depth the complexity of consumer response which goes beyond response and non-response (breaking down and classifying the response process). We saw how participants chose one of four response pathways: immediate, socially mediated; delayed response and individual indifference. In addition, this study provides a clearer classification/categorisation of customer response types (e.g. proactive and self-referencing LBS; reactive and cross-referencing LBS) as well as identifying corresponding location services unlike previous studies as identified in section 6.2.2 (Discussion Chapter).

7.2.2 Contribution 2: Clarifying the Role of Situational Context

This study adds more value to the work of Lee et al., (2009) and Zhang et al (2012) by generating further insight on the role of situational context on consumer response. For example, Zhang et al., (2012) referred to user specific factors (e.g. location factors and restrictions) in a framework depicting mobile web usage (see Section 2.6.4). Nonetheless, given the unique characteristics of mobile devices (e.g. ubiquity- always carried on the person, mobile devices have become default centres for LBS) and growth in a new genre of consumer (i.e. Transumer): need to explore situational decision making further. We have observed a significant shift in the retail landscape and consumer profile envisaged by the pioneer of situational context-Belk

(1975). Belk (1975) used five categories to describe the consumer behaviour environment (physical, social, task, temporal and antecedent states). In this study, we identify three contextual elements; timing, location and social influence (with whom when LBS message is received). Results indicated higher chances of response where relevant LBS are delivered taking account of these factors. Firstly, a consumer on the move in an unfamiliar environment will likely respond favourably due to convenient access to location services right at the point of need. Secondly, the timing of LBS was important: delivering location services at times when a customer is actively searching. Thirdly, the potential influence of third parties (e.g. friends): social influence where an LBS received in the presence of friends. We have also seen how consumers are becoming more discerning (Caddy, 2016), and agile. This presents new situational contexts yet to be fully explored (Chiu et al., 2014). For example, transumers seeking anytime, anywhere access to services as well as relying on recommendations from friends when making decisions about location services (e.g. banking and searching for restaurants- Galletley, 2016). This study extends extant studies (Lee et al., 2009; Zhang et al., 2012) further by providing various contexts as well as more specific understanding of the actual role of situational context which in this study is referred to as situational decision making.

7.2.3 Contribution 3: Articulating Role of E- lifestyle & Individual Attributes

We have seen in the review of literature how most consumer decisions are influenced by lifestyle (Hur et al., 2010). Nonetheless, we have seen in literature (see Weis, 2013) how e-lifestyle and LBS have been studied separately. Therefore, this PhD study presents a holistic account of e-lifestyles and LBS providing more detailed dimensions achieved by using a multi-method research design (e.g. observations, cartoon tests and focus groups). In addition, this study contributes to the LBS and e-lifestyle body of knowledge by conducting a synchronous study of these two areas. The researcher observed how most mobile marketing and LBS studies measured general consumer attitudes and LBS challenges (e.g. Dhar et al., 2011; Yu et al., 2013). In addition, e-lifestyle studies tend to focus on either scale validation or segment profiling (e.g. Lee et al., 2007; Yu, 2011; Nabirasool, 2014) despite literature linking most consumer responses (e.g. mobile marketing response) to lifestyle (Sheath & Solomon, 2014). We have seen in a review of literature (Karnowski and Jandura, 2014) as well as results of this study (see Chapter 5) how there is propensity for new usage patterns and styles due to agile mobile communication systems and services. The growth in mobile consumers seeking 'real-time' access to and consumption of goods and services in places of transit (Caddy, 2016)

highlighted a need for future research to enrich understanding of both mobile lifestyles and emerging marketing approaches (Abeele et al., 2014). Therefore, this study addresses Abeele et al., (2014) call for deep understanding on emerging lifestyles by identifying e-lifestyle characteristics unique for LBS users (See Conceptual Framework of consumer Perception and LBS response- Figure 5 Section 6.4). Thus, this study provides another perspective on e-lifestyles by identifying specific e-lifestyle attributes influencing individual response. For example, we saw how specific e-activities (e.g. navigation, finding hotels and searching for restaurants and other places of interests) supporting individual lifestyles are well received. There was also a clear distinction between e-activities that are either work or recreation related. Secondly, we saw how specific e-interests for example using Snapchat to post geo-tagged pictures on social media) and offers (e.g. Unidays) have become ingrained in daily activities. Therefore, this study extends the work of Yu (2011-adaped e-lifestyle scale) by going beyond scale construction providing deeper understanding on emerging lifestyles by identifying specific e-lifestyle attributes that influence response.

In terms of individual attributes, this thesis adds value in understanding individual factors that influence response. This extends the work of Louis and Wei (2000), Perks (2012) and Lamarre et al., (2012) who identified occupation, age and gender differences in individual response to mobile based marketing approaches such as LBS. In this thesis, the researcher identified how other individual attributes (e.g. life stage) may influence response. Individual attributes (e.g. age, life stage and occupation) were also linked to two response types (e.g. reactive and proactive-see Bellavista et al., 2012). In a way, this extends the work of Bellavista et al., 2012) who provided only two generic type of consumer response in LBS encounters. We have seen in this research how older employed individuals with families are more likely to respond to LBS of a proactive nature unlike most of their younger counterparts (either students living alone or young professionals without dependents).

7.3 Methodological Considerations

In addition, this research has used a projective technique (scenario analysis using tests) as part of a multi-method qualitative research approach (Figure 7.1). Such an approach is best placed when seeking deeper understanding into participant thoughts, feelings, and typical response process, otherwise difficult to obtain using alternative methods (e.g. surveys- see Catterall and Ibbotson, 2000- See Figure 24). Numerous studies have separately explored consumer response

to LBS and e-lifestyles in marketing practice (e.g. Lee, Jim and Jolly, 2009; Mir, 2011; Hassan et al., 2015; Yu et al., 2015). However, most of these studies relied on retrospective measures (e.g. questionnaires- See Table 4.1 and section 4.3.2.2 Methodology Chapter and using retrospective measures may not provide a clearer picture of consumer response (see Koenigstorfer et al., 2008).

Table 7. 1: Overview of Study Methodology

Approaches in Previous Studies	**Critique of Using these Techniques**
Questionnaire Lee, Jim and Jolly (2009) Yu (2011) Hassan, Ramayah, Mohammed and Maghsaudi (2015)	• Retrospective in nature • Ignores actual consumer response • Xu et al., (2009) notes how questionnaires maybe inadequate in measuring emerging aspects of marketing theory and practice (e.g. LBS, e-lifestyles and actual consumer response).
Approaches in This Study	**Benefits of Using these Techniques**
Multi-method Qualitative inquiry Online Observation Specialist Interviews (cartoon tests & in-depth interviews) Focus groups	• Studying of behaviour in natural settings (Elliot and Elliot, 2003) • Cartoon tests capture deeper insights into novel products and services (Koenigstorfer et al., 2008; Broeckelmann, 2010) • Integrating participant responses and interrogate rationale behind consumer responses. • A multi-method and synchronous research into LBS and emerging lifestyles enhances ability to identify factors influencing response and gaining deeper insight into response pathways.

Scenarios representing typical LBS encounters were specifically developed for this study. Cartoon tests have been used in previous studies to glean deeper insights into consumer response and future technology adoption (Koenigstorfer et al., 2008).

Lee et al., (2014) recommended use of new (radical) methods in examining home and away activities of individuals with high levels of involvement (e.g. transumers). Karnowski and Jandura (2014) also called for new methodological approaches in researching consumer responses. This PhD responds to these methodological calls, as well as extending the work of Koenigstorfer et al., (2008) and Broeckelmann (2010) by applying scenario analysis in jointly exploring consumer response to LBS and the role of e-lifestyles. As far as known, no prior research has applied cartoon tests in synchronous LBS, e-lifestyle studies. In this PhD, the use

of cartoon tests enabled participants to express underlying (subconscious) reasons for responding or not responding to select LBS. In addition, use of familiar LBS stimuli (see section 4.5.4 Methodology chapter) in typical conditions provided an effective means with which to mirror actual LBS encounters with consumers. Thus, use of the cartoon test method as part of a multi-method approach enhances the ability to identify factors influencing response, mapping the consumer response process as well as types of response.

7.4 Research Implications

Three implications can be drawn from this study. Galletley (2016) highlighted how consumers are now more discerning, seeking convenience when using services. In addition, Caddy (2016) reported how most consumers access various location services when commuting. Furthermore, Yu (2011) and Karnowski and Janduara (2014) highlighted the pivotal role of e-lifestyles and situational context in consumer response. Therefore, for LBS to work in a UK context, marketing managers need to fully understand e-lifestyle attributes influencing response to LBS.

We saw how most young participants (students) readily respond to reactive LBS. In contrast, agile older and younger professionals are more inclined to respond to location services of a proactive nature. Therefore, this insight can lead to the development of tailored LBS in the future (e.g. travel retail apps that mirror interests of different user groups (young versus old; in work and studying). We have seen in this study how young students prefer LBS for food and clothing offers delivered in between time and places and most of these are of a reactive nature. Marketers can tap into this knowledge by developing and targeting food and clothing related offers at consumers in places of commute. This may call for apps that embedded with Radio Frequency Identification technology (RFID) so that consumers can be tracked in real time based on e-lifestyles (e.g. e-activities e-interests, e-recreation). Insight from this study provides an indication of LBS user profiles based on both individual, e-lifestyle and LBS attributes. In addition, there is scope to match these LBS (e.g. food related apps) to various response pathways (e.g. immediate, social influence and delayed response) as previously discussed in section 7.2.2.

A second implication is linked to the various response pathways emerging in this study. Unlike previous studies that centred on general customer response, this study has achieved to breakdown the response process. We saw how participants chose one of four response

pathways: immediate, socially mediated; delayed response and individual indifference. Results of this study imply that marketers can encourage positive attitudinal response by:

a. Understanding in-depth the different consumer response pathways from immediate response through to indifference. Thus, targeting shorter term offers (e.g. valid for a day) where immediate response is guaranteed. Interestingly, person specific factors need to be factored into these responses for example, personalisation where mature consumers are involved. Therefore, marketers must correctly profile user groups when designing LBS and come up with apps for catering for different lifestages.
b. Results of this study imply that marketers can encourage positive attitudinal response by carefully targeting LBS (per Bellavista and Kupper 2012):

This insight should enable marketers to design and target appropriate location services for example significant clothing LBS offers where immediate response is needed (reactive). We have seen how young participants take pictures and share these using Snapchat. The marketer can develop aggregated apps that link user e-lifestyles to matching clothing brands in particular locations. This could then make for finer targeting of LBS based on what is trending on user interactions via apps. According to Mobile Marketer (2017) Starbucks and 02 partnered to deliver LBS via short messaging services (SMS); such insight could help marketers in developing appropriate LBS stimuli to achieve one of the four responses (see Conceptual Framework on Contemporary LBS Response- Figure 6.5 section 6.4).
In practice, knowledge of consumer response pathways could extend what other retailers such as Starbucks have tried in the past to reach consumers in real time in the UK.

A third implication relates to the role of brand knowledge in individual response. Hassan et al., (2011) argues strongly for the link between lifestyles and branding. In addition, Keller (2003) emphasized the importance of brand knowledge in consumer response based on previous use or exposure. In this research, we observed how prior brand knowledge provided a basis on which to understand individual expectations regarding LBS. Most participants indicated willingness to respond to familiar brands; those previously encountered. Therefore, informed by extant studies (e.g. Hassan et al., 2011; Keller, Aperia and Georgson, 2012) this thesis acknowledges the pivotal role of branding knowledge in consumer response. Thus, while messages about LBS may not directly emphasize branding, prior brand knowledge is a key element. When we think of brand influence on consumer response to LBS, extant

scales/theoretical frameworks (e.g. adapted e-lifestyles, VALS and UTAUT) exclude these. These scales focus instead on activities, interests, opinions). Therefore, there is relevance in recognising the importance of prior brand knowledge- the researcher sees value in identifying LBS attributes, e-lifestyle factors that can incorporate prior brand knowledge. Marketers can utilise this insight when designing LBS (e.g. apps) to appeal to existing customers. For example, where existing brands move beyond club cards/reward store cards (e.g. Tesco, The Body Shop, My Waitrose and John Lewis) to developing virtual cards that are stored as apps and activate when the user is within proximity of elected retailers.

7.5 Limitations of Research

Whilst this study has addressed all study objectives and makes important theoretical, contributions, it acknowledges its limitations as with any research of this nature. While this study did take extra precautions when gathering data, through online observations, it was not always possible to verify the authenticity of the comments (Maclaran et al., 2002). Nevertheless, the online observation method enabled the researcher to gather relatively anonymous views of LBS users as well as disparate opinions and responses towards LBS. In addition, online observation was only part of three methods used. Previous sections (7.2-7.5) acknowledged key methodological contributions gained by applying scenarios (cartoon tests) to more closely capture consumer response. Use of a sequential multi-method approach (online observation, specialist in-depth interviews and semi-structured interviews) allowed for triangulation (per Bryman, 2016; Saunders et al., 2016). Thus, using online observations as part of multi method data collection has enabled rich insight into consumer response pathways in typical LBS encounters. Therefore, the methodological approach was appropriate (or suitable) for this research inquiry given the nature of this study.

The second limitation exists regarding representativeness of the sample. As this was a qualitative enquiry, this research does not make claims that the findings are generalizable to other settings. While this study took care to ensure the participation of respondents from diverse background in the sample, this research was carried out with a sample from the midlands, UK. Thus, this study explored UK consumer response to LBS and the role of e-lifestyle, thus echoing a call by for research in different contexts apart from Asia, China and USA by Lee et al., 2007; and Zhou, 2012). Nonetheless, results of this study are localised; UK context and may not apply to other countries outside Western Europe. In addition, given the time limitation and the scope of this research, it was not possible to conduct a cross cultural LBS study.

A third limitation relates to the contextual focus of this study; on consumer response to LBS in the field of marketing. Thus, per recommendations of Yu (2011), this research explored user response to LBS based on use of smartphones unlike previous studies (e.g. Lee et al., 2007) focusing on general lifestyle instruments in various dimensions (broader and generic focus). Secondly, as recommended by Karnowski and Jandura (2014), this research has attempted to fulfil a need for research in mobile communication usage situations. Furthermore, this research has enriched understanding of mobile lifestyles and attitudes towards emerging marketing approaches (e.g. LBS) per Abeele et al., (2014). Nonetheless, this thesis only explored LBS in the context of marketing practice, hence transferability of these results to other disciplines yet to be established. When reflecting on contextual generalisability, the researcher acknowledges that response to LBS in other disciplines (e.g. education) could be somewhat similar. Nonetheless, adopting a narrow focus given time constraints has allowed for a thorough focus on LBS in the field of marketing. As such, it is anticipated that richer results emerging from this study will form a foundation for subsequent and cross discipline studies.

7.6 Future Research Directions

Considering the limitations set out in section 7.6, there is scope to build on this thesis in the future. Firstly, a broader follow up study, secondly, expanding the reach of this study by adopting a cross cultural study and thirdly, exploring consumer response to LBS in other disciplines.

7.6.1 Conducting Follow up Study

As previously stated, there is need to substantiate with further research that moves beyond single exploratory accounts of consumer response in LBS encounters. Thus, a need for follow up research to test/operationalise the conceptual framework as well as quantify consumer responses (establish actual patterns) could enhance the applicability of the outcomes of this thesis. This could provide managerial insight into the feasibility of designing and positioning LBS services given the novelty of these services. This should also allow for a larger sample that will be representative of the UK population per recommendations of Valentine and Powers (2013). In addition, due to the nature of this research, the focus was mainly on consumer response with limited time to explore risk in detail. The focus was on transaction risk and potential misuse of personal details which are addressed under attitudinal challenges (see section 6.1.2). The nature of LBS is such that service providers collect fine grained information

about users therefore concerns arise regarding how that information is collected, stored and used. Such concerns arise due to the nature of mobile devices (Shankar et al, 2010) and the concern over privacy (Zhou, 2012). Findings in this research also confirm individual calls for LBS that can offer opt-in, opt-out options to allay privacy/trust concerns. Therefore, there is potential to extend the scope of this PhD by adding risk dimensions (e.g. privacy and trust) in follow up studies.

7.6.2 Conducting Cross Cultural LBS and E-lifestyle Study

Given the localisation of this research into a UK context, results of this study may not be applicable to other countries outside Western Europe? Thus, value in further research in multiple countries where there is scope to consider cultural influences on consumer response as recommended by Karnowski and Jandura (2014). A review of extant studies on LBS (e.g. Yu et al, 2015) indicated cultural variations in consumer response (Lee et al., 2007; Zhu et al., 2009). In addition, Czarnecka et al., (2017, p.13) in their study on cultural meaning transfer and GLOBE dimensions recommended future research examining advertising in new media (e.g. online advertising, social media and mobile advertising). Therefore, it would be interesting to conduct further cross-cultural studies countries to investigate the role of culture in individual consumer response. Such a call is outstanding; was echoed by McCracken (1986) who forecast the continuous movement of cultural meaning in a society between locations because of various factors for example advertising.

7.6.3 Need for a Cross Discipline Exploration of Consumer Response to LBS

We have seen the growth in empowered consumers who are more discerning (Gronros, 2010) and agile (e.g. instaviduals- Ahmad et al., 2010, p.234 and transumers- Caddy, 2016 in Mintel). Nonetheless, this thesis only considered consumer response to LBS in the context of marketing: excludes other sectors (e.g. education [Benford, 2005, p.4] and health) given time constraints. In the health sector, kn3wledge of situational context could enable alerts on patients who registered for medical appointments. Similarly, in the Higher Education (HE), knowing where, when and with what students want to be reached with could influence the scheduling and response to appointments. Furthermore, there is potential for LBS to provide vital class information and seamless navigation around campus especially for new students. Therefore, extending this research to other sectors could provide much needed insight into consumer response to LBS in different contexts as recommended by Karnowski and Jandura (2014).

8.0 References

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9. 0 Appendices

Appendix 1: Participant Profile

Respondent profiles from phase two and three of the research are presented in this appendix. Thus, Appendix 1 outlines the profiles from cartoon tests (e.g. R1CTM-respondent one cartoon tests male) in Table 9.1 followed by an overview of focus group member profiles (R1FGF for example -respondent 1focus group female private tutor for the young professional group) in Table 9.2. The second focus groups (Table 9.2) comprised students (e.g. R1FG1M- respondent one focus group 1 male student). Lastly, for the older established working-class group (see also Table 9.2) with family these were coded as for example R5FG3M (respondent one focus group 3 male accountant).

Table 9 1: Specialist Interview Participant Profile

	Age	Gender	Occupation	Life stage	Children
R1 CTM	29	Male	Researcher	Single	No
R2 CT	26	Female	Business Development Manager	Single	No
R3 CT	30	Female	Radiographer	Married	One
R4 CT	23	Male	Radiographer	Single	No
R5 CT	26	Female	Admin Secretary	Single	No
R6 CT	25	Female	Student	Single	No
R7 CT	27	Male	Student	Single	No
R8	24	Male	Student	Single	No
R9	25	Female	Student	Single	No
R10	31	Male	Accountant	Married	One
R11	27	Female	Digital Marketer	Single	No
R12	39	Male	Tax Officer	Married	One
R13	31	Male	Student	Single	None
R14	32	Male	Student	Single	None
R15	33	Female	Student	Single	None
R16	29	Male	Buyer	Single	None
R17	32	Male	Store Operative	Single	One
R18	33	Male	Purchasing Officer	Married	Two
R19	23	Female	Student	Single	None
R20	30	Female	Academic	Single	None

Table 9 2: Focus Group (s) Participant Profiles

	Age	Gender	Occupation	Life stage	Children
R1FG1M	28	Male	Private Tutor	Single	No
R2FG1F	23	Female	Clerk	Single	No
R3FG1F	27	Female	Lecturer	Single	No
R4FG1F	24	Female	Sales Assistant	Single	No
R5FG1F	26	Female	Admin Secretary	Single	No
R6FG1	32	Female	Lecturer	Single	No
R1FG2	24	Male	Student	Single	No
R2FG2	23	Male	Student	Single	No
R3FG2	28	Female	Student	Single	No
R4FG2	22	Female	Student	Single	No
R5FG2	28	Female	Student	Single	No
R1MFG3	47	Male	Business Development Manager	Married	Three
R2MFG3	48	Male	Accountant and Mature student	Married	Three
R3MFG3	53	Male	College Tutor	Married	One
R4MFG3	40	Male	Entrepreneur	Married	One
R5MFG3	41	Male	Accountant	Married	Four

Appendix 2: Literature Review Outline

Table 9 3: Summary of Lifestyle and E-lifestyle Literature

Author & Journal	Title	Dimensions	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Sheath & Solomon, 2014. *Journal of Marketing Theory & Practice*	Extending the Extended Self in a Digital world	. . .	. The study focuses on the impact of changes in technology and individual lifestyles on consumer behaviour. Consumers' lives are rapidly changing as they now spend more time online, creating digital identities. These enlightened consumers choose and value digital items that express both their physical identities and lifestyles. Proliferation of apps, smartphones, smart watches and smart glasses removing the need to visit physical stores; new ways of shopping. Consumers' style of shopping has changed from visiting bricks and mortar retailers to click and mobile points of purchase. Changes in lifestyle resulting in enhanced real time and real-world purchase intentions.	. There is a steady collapse of the boundaries between producer/consumer, offline/online, and body/technology. . Steady fusion of these boundaries-enormous influence for consumer behaviour theory & marketing practice. . Need to re-examine what a consumer really is in a digital world & the significance consumer privacy.
Nabirasool, 2014. *International Journal of Retailing & Rural Business Perspectives*	Consumer lifestyle & demographic factors	. Lifestyles . Demographic Factors .	. Seeks to analyse the relationship between lifestyles and demographical factors (e.g. age, occupation, gender, and type of residence, location of residence and nature of residence).	. Significant demographic differences amongst consumers belonging to different lifestyle segments (e.g. education, gender, occupation and location of residence; type and nature of residence).

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Yu, 2011. *Journal of Internet Research, Vol.21.*	Construction and Validation of an e-lifestyle instrument	**.** E-lifestyle **.** Lifestyles **.** Activities **.** Interests **.** Opinions	**.** Aims to construct and validate an e-lifestyle instrument. **.** Seven distinct components emerged from the 39 items of the e-lifestyle scale; these components significantly influence and shape individual e-lifestyles. **.** Need driven e-lifestyle emerged as the greatest motivator of e-lifestyle, interest driven e-lifestyle was second, entertainment-driven e-lifestyle; third, sociability-driven e-lifestyle; forth, perceived importance-driven e-lifestyle was fifth. **.** Uninterested or concern-driven e-lifestyle was sixth. These two are contrasting representing negative opinion and contrasting terms. **.** Novelty-driven e-lifestyle was seventh. **.** Concerns for potential negative effects brought by the product or service. **.** The more a product or service relates to fulfilling consumers' needs in daily life and work-related needs, the higher the possibility of adoption.	**.** Research contributes to the theoretical e-lifestyle scale; adds to knowledge and understanding of the main antecedents of e-lifestyles. **.** Marketers need to effectively dissolve negative concerns by promoting need-drive e-lifestyle products or services. **.** Need to channel more effort and resources on highly profitable and valuable customers (20% of regular consumers who generate 80% of the business for a firm) rather than all customers. **.** While extant research has mostly focused on general lifestyle instruments across various domains, there is need for research that applies the e-lifestyle research to different domains such as the tablet, personal computer, online banking and mobile shopping. **.** Limitations- respondents from the second sample selected only according to the age distribution of the population. **.** Recommended future research using stratified random sampling to reflect the demographic distribution of the entire population to examine and improve the reliability and validity of the e-lifestyle scale.

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Hassan, Ramayah, Mohamed and Maghsoudi, 2015. *Asian Social Science, Vol.11*	E-lifestyle, customer satisfaction and loyalty among generation y mobile users	. E- lifestyle . Customer satisfaction . Loyalty . Mobile user . Generation y	. To examine the impact of e – lifestyle on customer satisfaction and loyalty from mobile consumers in developing countries (e.g. Malaysia). . E – Lifestyle has significant effect on customer satisfaction and loyalty. . The internet has greatly impacted the way people live. . Individual lifestyles are stronger predictors of consumer behaviour.	. The four major dimensions of e- lifestyle concurred with the key features of formative measurement models. . A new second-order formative reflective model of consumer e – lifestyle was developed. . New rigorous psychometric result on e – Lifestyle measurement that can be weighted.
Karnowski and Jandura, 2013 *Telematics and Informatics Vol.31.*	When lifestyle becomes behaviour: A closer look at the situational context of mobile communication	. Situational context . Location Based Usage . Location – related conditions . Usage . Lifestyles	. To establish user lifestyles merging from new form of mobile device usage and communication. . To determine when lifestyles become a form of behaviour; actual usage situations of mobile communications. .. Three types of usage situations: communications usage situations, mobile usage situations. . Mobile communications normally occur at home (mobile at home/ 'Homezone'), on 'their way' (on the go), hanging out with peers. . Variations in usage situations; age, gender, and educational level. . Differences services sought or justifications to use these services amongst the different clusters. . Entertainment of greater importance when at work or with friends (Work or friends).	. Further research needed in the area of mobile communications usage situations and mobile internet usage due to methodological and theoretical constraints of this study. . Use of an in-situ measurement (e.g. experience sampling method) in future studies is recommended (see Hektner et al., 2007; Karnowski and Doedens, 2010; Larson and Csikszentmihalyi, 1983). . Need to conduct longitudinal surveys with other nations apart from the Western European used in this instance.

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Lee, Soutar and Louviere	Measuring Values Using Best-Worst Scaling: The LOV Example		. To analyse the current measurement scales for values and propose an alternative way to collect values data. . Develop a measurement approach that overcomes measurement issues created by either rating or ranking scales. . To compare the results gathered from the BWS approach with those gathered from traditional ratings and ranking scales. . The BWS approach enabled respondents to provide values information in a more meaningful way compared to rating scales. . The rankings procedure possibly biased in the opposite direction of the ratings data. . The BWS provides much greater discrimination when examining value expressive behaviours unlike the rating approach. . The BWS data were very different and relatively like the ranking data. . BWS items were less skewed and there were reasonable negative correlations. . Computed correlation results between the value items and some value expressive behaviours (Bardi and Schwartz, 2003); BWS showed more sensible and more discriminating results than the rating items.	. Extant study considered data from only one country; further research to apply the BWS in cross cultural settings (Taylor, 20005; Craig and Douglas, 2000; Van de Vijver and Leung, 1997; van Herk, Portinga, and Varhallen, 2005). . Further research to determine the applicability and generalizability of these results in other contexts as well as other values approaches.

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Beaty, Kahle, Homer and Misra, 1985. *Psychology and Marketing, vol. 2.*	Alternative Measurement Approaches to Consumer Values: The List of Values and the Rokeach Value Survey	. Values . Consumer behaviour .	. To compare two methods of measuring consumer values; the List of Values and the Rokeach Value Survey. . To assess the social desirability of bias present in the two values measurement techniques. . To assess the social desirability bias present in the two value measurement techniques. . To determine the validity of the study of values to the understanding of consumer activities, consumption experiences and preferences. . The LOV has a higher percentage of items that influence people's daily lives. . Both instruments entail some social desirability responding, have convergent, discriminant, and empirical validity for consumer research. . Difficult to directly compare the two value measures for overall compatibility given that neither approach seeks to form any overall scale.	. Value research of high potency to marketers in aiding understanding of consumer response and consumption habits. . Further research needed to probe Emerging areas of consumption (e.g. telephone usage, computing), additional populations, as well as additional methods of measuring values. . Need to investigate the links between values and behaviour; e.g. how value interacts with situations.
Kahle, Beatty and Holmer, 1986. *The Journal of Consumer Research, vol. 13.*	Alternative Measurement Approaches to Consumer Values: The List of Values (LOV) and Values and Lifestyle (VALS)	. Values and Lifestyle . List of Values	. Compares two methods of measuring consumer values (LOV and VALS). . LOV is the popular method of measuring consumer values, easy to use and relates more closely to consumer behaviour. LOV has greater predictive utility than VALS in consumer behaviour trends; LOV accounted for more variance. LOV allows one to obtain demographic predictions separately unlike VALS, hence the source of influence can be identified easily.	. Research on LOV and VALS still in infancy hence need for continuous research in this area.

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Abeele, Antheunis and Schouten, 2014. *Telematics and Informatics.Vol.31.*	Me, myself and my mobile: A segmentation of youths based on their attitudes towards the mobile phone as a status symbol	. Status . Mobile phone . Mobile lifestyle . Mobile culture . Youth lifestyle . Mobile fashion . Time poverty	. Aims to further the understanding of the heterogeneity in adolescent mobile phone use. . To examine & distinguish between different mobile lifestyles within the Mobile Youth Culture. . Time poverty/time pressure/hurriedness are typical in todays' accelerated society (Wajcman, 2008). Time poverty and hurriedness, are central features in the lifestyles of the elite (Wollscheidt, 2007) . Most respondents had negative attitudes towards the mobile phone as a fashion symbol, as a display for popularity, and as a display of one's time poverty. . Three key lifestyle segments emerged; the trendy users, the engaged users and the thrifty users. These were closely related to each other-therefore no three distinct lifestyles were identified. . There is heterogeneity in adolescent mobile phone use but this heterogeneity is not arbitrary.	. Future research should use other predictors of mobile lifestyle that can help gain insight into mobile phone use, importance of mobile internet access, new uses for mobile phone e.g. LBS (see also Dhar & Varshey, 2011), group messaging etc. (Rohn et al., 2012). . Future research should enrich understanding of mobile lifestyles & attitudes towards emerging technology and marketing approaches such as LBS. . The study is the first to quantitatively investigate heterogeneity in mobile phone among adolescents. . There are no three distinct lifestyle groups in adolescent mobile use. . Future research to investigate the effects of mobile lifestyles e.g. on identity development, on social capital, friendship and relationships. . Lifestyle characteristics act as important predictors in mobile service adoption; the predictors will serve as pivotal indicators for research and practice (Bouwman et al., 2012).

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Beatty, Kahle, Homer and Misra, 1985. *Psychology and Marketing, vol. 2.*	Alternative Measurement Approaches to Consumer Values: The List of Value Survey	. Values . Consumer Behaviour .	. To examine an alternative measurement approach to values (Kahle, 1983), the List of Values (LOV) and to compare this value with the extensively used RVS measurement technique/ scale. . Theories underlying these measurement approaches were also tested.Three key comparison dimensions: the degree to which each technique captures values of interest to marketers; the propensity of the technique in obtaining responses that constitute social desirability; and the extent to which each measurement system helps in the assessment of attitudes, interests, and behaviours across the main areas of consumption – leisure activities, preferred media and gift - -giving. . Difficult to assess the two values for overall comparability as there is no overall scale of measurement; use of convergent and discriminant validity measures. . LOV items appear to influence people more in their daily lives. . The two items in the values surveys are related to each other: each measure has convergent and discriminant validity with appropriate subsets..	. . Further research on social desirability to enhance understanding and knowledge of to eliminate the inherent bias. . Great possibilities and potentialities of values research to marketers which should be vigorously pursued. . Future research needed to explore other areas of consumption (e.g. telephone usage, and computing), additional populations and additional methods of measuring values. . Further research to provide more information on the links between values and behaviour and how values interact with situations.

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Vyncke, 2002. *European Journal of Communication. Vol. 17.*	Lifestyle segmentation: from Attitudes, Interests and Opinions, to Values, Aesthetic Styles, Life Visions and Media Preferences	. Aesthetic styles . Lifestyles . Life visions . Values . Psychographics . Market segmentation	. To develop new approaches to constructing lifestyle typologies using the more general and stable concepts; values, aesthetic styles and life visions. . Testing the applicability of the concepts to form meaningful lifestyle typologies in four different areas; goods (cars), services (tourism), not-for-profit (political parties) and media (television programmes, films and magazines). . Compares the different segmentation systems in each of these markets. . Values, aesthetic styles and life visions (alone/combination) can lead to very balanced and meaningful lifestyle typologies. . These general lifestyle typologies often outperform classic demographic & socioeconomic segmentation variables with regards to product benefit or attribute evaluation.	. A global typology that brings together some aspects of values, aesthetic style preferences and media preferences is recommended as it provides the richest data as well as yielding the best discriminative performance compared to other lifestyle segmentation methods. . Lifestyle typologies are purely inductive hence not guided by theory: current study based purely on exploratory research. . Low explanatory value of lifestyle types/dimensions concerning consumer behaviour; the amount of variance explained has often been very small (modest), at times way below the expected variance. . Current study has overcome the weakness by using more reflective personal characteristics (values, life visions, and aesthetic style and media preferences) as opposed to the more variable and superficial AIO items. . Future research needed to develop value inventories that can be used in various contexts and markets.

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Valentine and Powers. *Journal of Consumer Marketing. Vol. 30.*	Generation Y values and lifestyle segmentation.	. Generation Y . Market segments . Media habits . VALS	. To provide a segment characterization of Generation Y using the VALS typology as well as providing insights into the media habits of this population. .GY greatly influenced by technology and the internet, evolved greatly hence difficulties in targeting this group. . Provides the first segmented characterization of Generation Y consumers. . VALS Types-92 % of respondents belonged to three of the VALS types: 59 % were experiencers, 24 % were strivers, and 9% were achievers; remaining 8% were Innovators (3%), Believers (2%), and Thinkers (1%). Results + on the resources of each segment member consistent with high and low resources of the VALS typology. . Media Habits-Electronic media is the primary media used by this group; the internet (49%), television (54%) rated high to very high in importance as a source of advertising information. . Traditional printed media rated lower than electronic media. . Notable differences in media habits between the Experiencer, Strivers, and Achiever segments of generation Y.	. Experiencers are the dominant Generation Y VALS type. . VALS extensively applied in commercial setting than in academic setting hence the research is timely; provides managers with further understanding of Generation Y behaviour. . Need to conduct further research with a non-random sample that represents the entire population.

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Park, Lee and Chung, 2013. *Behaviour and Information Technology*	Why don't customers go internet shopping in Korea? Segmentation of consumer lifestyle approach	. Internet shopper . Consumer lifestyle . customer value . segmentation	. To analyse the characteristics of internet shoppers and non-internet shoppers residing across Korea. . Non- internet shoppers are married, earn relatively high incomes & have little experience in accessing the internet. . Non-internet shoppers followed the product/service information from internet shoppers. . Non-internet shoppers preferred not to use credit cards during internet shopping.	. Non- internet shopper snot analysed which could be done in the future. . Further research using techniques such as data mining could have potential to reveal hidden characteristics possessed by non- internet shoppers. . Future studies should continuously track and analyse characteristics of internet shoppers and non-internet shoppers in Korea.
Kucukemiroglu, 1997. *European Journal of Marketing Vol.33.*	Market segmentation by using consumer lifestyle dimensions and ethnocentrism: An empirical study	. Consumer behaviour . Consumer marketing . Lifestyles . Consumer ethnocentrism	. To identify the consumer market segments existing among Turkish consumers using lifestyle patterns and ethnocentrism. . Results point to several lifestyle dimensions amongst Turkish consumers which in turn influenced their ethnocentric tendencies. . Non-ethnocentric Turkish consumer harbour more favourable beliefs, attitudes and intentions regarding imported goods than their ethnocentric counterparts. . Several lifestyle dimensions emerged: fashion consciousness, leadership, family concern, health consciousness, carefreeness, community consciousness, cost consciousness and practicality. . The four major lifestyle dimensions emerging among Turkish consumers (e.g. fashion, leadership).	. There is need for marketers to modify product and messages as well as stress product attributes, benefits to prospective consumers (e.g. moderates and traditionalists).

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Sarli & Hon Tat, 2011. *International Journal of Fundamental Psychology & Social Sciences, Vol.1*	Attracting Consumers by Finding out Their Psychographic Traits	. Psychographic . Segmentation . Lifestyle . Personality values	. To investigate on current studies about psychographic variables and segmentation as a strategy. . New technology impact both marketers and customers, need for new strategies to respond to these changes. . Consumer lifestyles and personalities are also affected by these changes . Psychographic segmentation has the value of reducing advertising costs and increases profits based on prior insight of consumer needs and wants.	.Future research to focus on effect f consumer lifestyles on technology adoption.
Anderson and Golden, 1984. *Advances in Consumer Research, Vol.11*		. .	. To revive and refine lifestyle as a theoretical and research tool and variable for segmentation. . Contrasts lifestyle and cognitive style showing the logical symmetry and complementarity between lifestyle and psychographic research.	. Lifestyle and cognitive style can be usefully employed through sequential segmentation. Lack of published lifestyle literature addressing (a) definitional consensus (b) operational clarity, and (c) theoretical context.
Lee, Scoot and Packer, 2014. *Annals of Tourism Research, vol.48*	Habitus and food lifestyle: In-destination activity participation of slow Food members	. Lifestyle . Habitus . Involvement . Motivation	. To examine the travel motivations and destination activities undertaken by Slow Food members. To provide a theoretical understanding of this behaviour using the concept of lifestyle and Bourdieu's *habitus.* . Despite the diverse background of Slow Food members, study results demonstrated that group members had a lifestyle that they shared and valued.	. Further research to examine the 'home and away' activities of individuals who have a high level of involvement interests. . Study results not entirely representative of the general population; results describe only one specific group that has high involvement in food.

Author & Journal	Title	Key Themes	Focus & Main findings	Limitations/ Recommendations/Implications/ Conclusions
Chan and Leung, 2005. *New media and society, vol. 3*	Lifestyles, reliance on traditional news media and online news adoption.	. Lifestyles . Adoption	. To examine the predictive power of lifestyle orientations, reliance on traditional news media, attributes of online news, traditional mass media use, and demographics on online news adoption. . Findings point to 6 lifestyle types within the group of internet users thus confirming the VALS characterisation by SRI Consulting Business Intelligence's (2003). . Hong Kong internet user scab be characterized as experiences, strivers, innovators, makers, thinkers or survivors; linked to online news reading behaviour. . Lifestyles not predictive of the likelihood to adopt online news/ the overall level of online use, but are pivotal for the types of online news that are read as well as the online attributes that are used. . Lifestyle compliments demographics in predicting new media adoption. . Newsreaders with different lifestyles have distinctive online news adoption behaviour: need for customised news services to satisfy the different needs of newsreaders with diverse lifestyle orientations. Interactivity can satisfy the need for seeking fun among strivers, a desire for self- expression among makers and aspiration for new ideas on the part on innovators	. Sampling errors as respondents of this study were recruited through interpersonal contacts. .

Appendix 3: Online Observation Content Analysis

As indicated in the methodology section, analysis of online observations was done first using NVivo and then manually. In this appendix, an example of a manually analysed (content analysis) transcript is provided showing the process and how some of the themes/codes emerged. In total, 9 participants contributed in this transcript.

Upvote 1 Downvote Comment

[T T]

My broad answer would be no. I think people want value (ie what's in it for me?).

At the moment, checking in provides the most value for the business (ie data to provide targeted coupons and promo). While that is powerful for the business (and somewhat helpful for the consumer at the moment), I think this is short term.

Imagine if every business in the world used the current checkin / coupon model. As more and more businesses use this type of couponing, it will become the next version of [illegible] (just like email did). For example, even though I might get a really targeted coupon when I walk into BestBuy (i.e. via ShopKick), that couponing service becomes a lot less helpful if every store that I walk into offers coupons. It becomes redundant.

At the end of the day, I think the key to success in mobile (and any other new technology) is to provide something useful for the user and then figure out how to monetize it. Solve a problem for the user and then build a business around that.

This is contrary to most the other products on the market right now, which are essentially doing the mobile version of direct postal mail and riding a trend that I think is short term.

Upvote Downvote Comment

[B, I] ⊕ feelings

164 Views

As more and more users move to smart phones, location-based social networking will continue to gain momentum (Facebook Places, gowalla, foursquare, yelp, etc.). Being notified of nearby deals, friends and other location-based information of likely interest.

MeetingWave just launched a location-based business networking iphone/ipad app:

http://itunes.apple.com/app/id40...

The app allows you can set up business or social networking meetings on the fly with new people! We don't disclose your identity, contact information or specific location. Users can check "Who's Nearby?" and send a "meeting request" to anyone they like to meet over coffee or lunch. Meet potential new clients or fellow alums for job leads.

Members can have their work or alumni email addresses "verified" by MeetingWave and display an indication of that verification (e.g., @ibm.com or @brown.edu) on their profile. When someone sees verified email domains on a profile, they will know the user must be associated with the university or company identified in the email domain helping people feel more comfortable meeting the user (and vice versa). Only the verified domain is displayed - the user's personal email address will not

Feelings

* Sees short-term interest
* Customers want value from app ("what's in it for me?")
* Yes as long as services are tailored & useful
* Concerns over spam — aka no email the new invasion of privacy

Power

* Sees future in LBSN when coupled w/ adoption of smart phones

Agrees

eg. of new LB. business networking app for iPhone.

be disclosed for everyone to see.

Android coming soon and we'll continue to make improvements.

• View Upvoters

Upvote 1 Downvote Comment 1

It depends on the consumers. Some think that Location Based Service is a great tool while some consumers find the location based service annoying.The dimension of location brings social networks back to reality, bridging the gap between the physical world and online social networking services. Users are bewitched by the location based social networking as it throws a number of advantages. A new study conducted by the Pew Internet & American Life Project found that about 74% of smartphone users use location based services to find out information about what's around them. In addition, one in five (18%) are checking in to local businesses — from restaurants to movie theaters — with Geo-social services. Also Consumers get reward, discounts, free vouchers, invitations to special events and even more, when they are connected with a business which in turn urges other users to go social with location.

The ubiquity of location information may also increase the risks of stalking and domestic violence if perpetrators are able to use (or abuse) location-based services to gain access to location information about other people. Also when you are posting your whereabouts to the internet, which some people believe is a privacy issue. Another drawback is that you are putting your identity out there, and your reputation could be ruined which involves ethics. Data ownership is another issue, which concerns the economics/ownership cornerstone of the class. Companies can sell your information, which is an issue to people.

In my opinion, the pros outweigh the cons. Given the stats regarding the increase in use of location-based services, it may be worthwhile for anybody to consider spending the money or investing in Location based service platforms

Dec 1, 2014

Upvote Downvote Comment

158 Views

No.

For the current silent majority, the perceived risks outweigh the uncertain returns.

written Jun 3, 2010 • View Upvoters

Feelings

Mixed feelings - balanced approach

(captivated)

Contrary to earlier comments by HB, is Eva sees value in LBSN, citing a 2011 report by Pew Internet & American life Project where found 74% of smartphone users use LBS to find info about their area (18% check in to local businesses (eg restaurants, movie theatres) using Geo-Social Services.

+ See value in LBSN

Privacy concerns eg tracking, stalking, identity theft, data ownership

Sees more advantages in using LBSN than disadvantages

have to ask them, changing hte selfish gesture into a shared chore, but more importantly a social affirmation: they will be able to see the consequences because they usually have an active account too; the point is less to geolocate rather then to make a social statement of closer, physical relations (a needed input on the apparently still rather flat and 'virtual' social graph). Context is then given by the composition of the group (and filtering can easily be achieved with only showing the update to people who know more then one participant).

Meeting other people becomes more acceptable with this added context (no more bothering a colleague on a date). **The participant list** is actully fuller because you only need one tagger in the group, fostering more then a demultiplying effect, but reaching the threshold for more general participation.

In a nutshell:
Yes, users want a location based social networking, but they want is to be **primarily social** rather then location based. The best LBS so far is **Facebook Events**: I use it all the time to make new connection: "Have you answered Yes to this party's Event (on Facebook)?" is the new "Can we be Friends?"

[illegible] • View Upvoters

[illegible] Avid user of foursquare [illegible] Blog

514 Words • Upvoted by Harry Heymann

Unequivocally, yes.

I love The New York Times but this particular article's contribution to the discussion and debate around location-driven services is...exactly zero.

The honest reality is that we simply don't know whether 500 million users will "check in" 3-4 years down the road. Focusing on checkins is like wondering, in 2005, whether 500 million users would be poking each other using the poke link on Facebook. It misses the larger point (the ascendancy of social networking) and is a mostly futile line of inquiry.

Here's a set of safe assumptions, on the other hand: consumers will continue to buy increasingly powerful mobile devices. 100% of those devices will be connected to the Internet 24/7. Businesses large and small will try to figure out a way to reach those consumers for marketing and loyalty reasons. This combination of mobile/local/merchants will somehow involve social cues and actions, either as explicit check-ins, implicit background alerts when friends take actions, friend suggestions based upon shared interests ("you may want to meet X because they're a rock climbing buff"), etc. You can choose to narrowly define it as location-based social networking or you can view it as a natural evolution of social and mobile tech trajectories.

How **exactly** things play out, no one knows. But that's why startups exist, no?

Written Nov 7, 2010 • View [illegible]

Upvote 16 Downvote Comment 1

Do consumers want location-based social networking? - Quora

Ask or Search Quora

Ask Question Read Answer Notifs Shelton

Social Consumer Real Time Location Services Gowalla +5

Do consumers want location-based social networking?

See the NYT perspective:
http://www.nytimes.com/2010/11/0...

Answer Request Follow 65 Comment 1 Share Downvote

11 Answers

Users really enjoy having services adapted to where they are — however, those are really hard to adjust to most current social habits. This paradox is the reason why Orange's project ON takes so much time.

The first issue, blatant to the 96% of people who haven't used FourSquare is that when they **get into a bar** with you, a friend in the 4% of users, instead of politely asking "How are you?" and listening attentively to his rambling, ie. elementary grooming, you fumble you phone, spend far more time then you realise finding the app, the proper button to check-in, the right name for the place you are in, etc. All that for whom, that is supposedly more important then someone who took the time to schedule an appointment with you, be in time, wait in the cold wind? — "No one really." Self-

Upvote 6 Downvote Comments 1+

updates, and a new polite convention of **discretion**: "This is not for me, let's pass" when you see a colleague's family pictures, your cousin talking shop all along a 50-comment long thread, that gay graphist you worked with a year ago crying his new single status. All information that might come handy some time ("By the way, how was holidays with the family?", "How are you doing at your new job, not too hard learning all those acronyms?", etc.) That's actually the main advice to parents: no matter what, do not comment on their threads, but behave as if you read them.
The same is even stronger on twitter. LBSs don't really have the same option: a location carries little euphemism, no ambiguity when needed, hardly any deniability and demands some repeated interactions... Social filtering isn't enough: you **need algorithmic** screen panes. More specifically, location is heavily contextual: while to most, I'm "at work", to my colleagues, I'd rather say that I am "in room A301, waiting for the meeting to convene." Similarly "at home" can turn to "in the shed, don't disturb until diner." In actuality, programming that is tedious, and open problem still.

That issue is well resolved by Facebook that allows you to **tag along** your friends: you

https://www.quora.com/Do-consumers-want-location-based-social-networking[18/03/2016 14:40:02]

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and connections if these make sense to them in the context of their life's moments. In Foursquare, these days for me, it is the gamification element in the social leaderboard with friends or the discovery where your friends are which attract. In the LBS app harpoon, it is the serendipity on what others who have explored an area in your vicinity which attracts. With Tiki.is, a new MIM app it is the voices left behind in a select city which provides local insights and knowledge to people who would like to know more about a neighbourhood or even learn the language as his aspiration is to get to that place one day.

Location-based connections I feel make daily habits (what Marissa Mayer highlighted as the focus for Yahoo!) more sticky and enable services which enable daily habits more retentive in nature.

Upvote · Downvote · Comment

I wonder what percent of the 4% of active location based social networking peeps are actually "networking" at all or just simply playing the card in the "broadcast my status to my peers" space. Checkin's are just the beginning of this trend and definitely not a sustainable one on its own, which is why you see SCVNGR, Foursquare and Gowalla going for the game aspect more. But even then is that sustainable? The addition of Facebook places and the pending rollout of their Deals is about the only really idea in the mix, fresh in terms of opening up that API so you can read and write and that Facebook will be pushing to get serious footing with businesses to post Deals and get traction going that pushes the whole trend more toward a real ROI for both consumer and business. As an added benefit you can develop on top of that platform and ride their wave. Let's skip 10 years in the future and wonder about how well it worked out? I wonder. Even then I think these services still cater to a small audience, be it a loud, early adopter, the first 10 million people who bought an ipad like audience and thats ok. These are the same people who 6 years ago saw the rise of Digg and thought it was hot frak and the wave of the future only to sit on bench today and watch that hotness die off in a heart beat as they move on to the next thing. Point being this sector of LBS isn't meant to go mainstream but that doesn't mean it won't carve up a few million investment along the way.

Technology is only going to get smarter, and potentially more complicated as sensors get added and yes soon your dream of a Minority Report existence will be here, for some it's been here waiting to be manifested or actually already is manifested for quite some time. The big dangers this whole scene has however is the adoption rate which I think is limited already to early adopters, the growing privacy issues that have now infected the a wider audience of people from policy makers to politicians theres alot more to privacy equation than ever and most notably the disconnect between what people really want and retailers and businesses really want. The retailer and marketer really wants you to tell them everything, where you are, how you feel, why you didnt buy x, y and z, right now they'll settle for just a constant stream of position data, preference data as to where you go, they don't know why, they can try and dig at that looking at who you go with to where you go, they still only have mass assumptions on that data set- though a ton of data in there, but as they continue to map your data trace they get more and more. People will wise up to that which is why the 4% makes sense in the first place.

Do consumers want location-based social networking? - Quora

Yes, all the way.

In these days of information overload, any information service would be lacking if it does not allow me to personalize the experience based on my social graph.

Similarly, in the years to come, I believe the same will be said about location-based services; any information service will be lacking if it does not allow me to personalize the experience based on my location &/or the location of my friends (because the social graph will also be available, see above para).

By 'location' I mean something broader than lat/lng co-ordinates, or a venue check-in; think about patterns in location history, location in relation to your friends, geo-fencing and the meaning that can be derived from location + speed and direction of movement. I believe these additional ways of using location will help mainstream LBS emerge.

Upvote 1 Downvote Comment

[SJ]

I am not very confident, that there is such thing as "Location Based Social Networking" at all - there is simply just "Mobile Social Networking". Location is mobile, right? Whether your phone sits in your gym locker, your purse on the bus or bar table next to your beer. Knowing your location, whereabouts, interactions between physical and digital realities have been ubiquitous for several years already. As such this is nothing new. Privacy fanatics delay the progress and split the market in two: those who pay and those who don't (to use these freemium/ad-based networks). Of course new businesses will expand and evaluate on new technical opportunities like in the article discusses about connecting retail with consumers but in long term when the value of the services either 1) knowing your friends whereabouts 2) free or discounted deals/coupons 3) finding & searching the buzz, new businesses etc are available on generic platforms related to the context, embedded to most services, the location is merely an enabler. Whether that relates to connecting people or connecting consumers with offers. I find connecting people more sexy. Check the link :)

http://www.time.com/time/business

Upvote 2 Downvote Comment

[WN]

My feeling is that consumers would only look towards having location-based information

https://www.quora.com/Do-consumers-want-location-based-social-networking[18/03/2016 14:40:02]

Appendix 4: In-depth Interview Data Collection Instrument

A data collection instrument was created for phase two of the study based on typical LBS that emerged from pilot cartoon tests. Therefore, the researcher created two sets of cartoon exhibits; one for males and the other for females. In total, four LBS user contexts representative of typical encounters were presented; purchased, engagement, brand experience and travel based. These scenarios are presented in this appendix.

Research Participant Information Sheet

My name is Shelton and I am conducting this interview as part of research into Location Based Services (LBS) and consumer lifestyles. I would like to understand user awareness, experience and motivations to use LBS. In addition, I want to identify how mobile lifestyle characteristics and situational context may influence response and choice of LBS. I also want to determine other factors that may influence behavioural response towards LBS. Your participation will provide much needed knowledge into consumer response to LBS. Information collected in this interview will be used only for this research and no personal identification information will be used during or after the interview. This project has been reviewed and approved in accordance with De Montfort University's ethics review procedures. I will require your voluntary consent to participate in this interview. Are you happy to be interviewed today?

Response: ----------

Signed: ----------

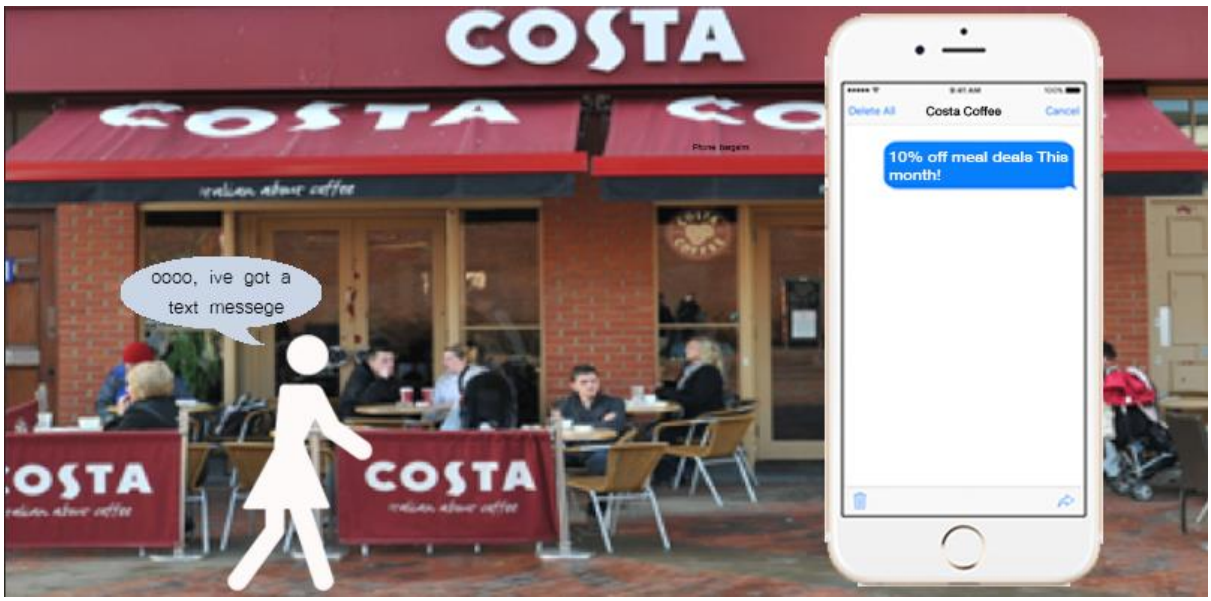
Date: ----------

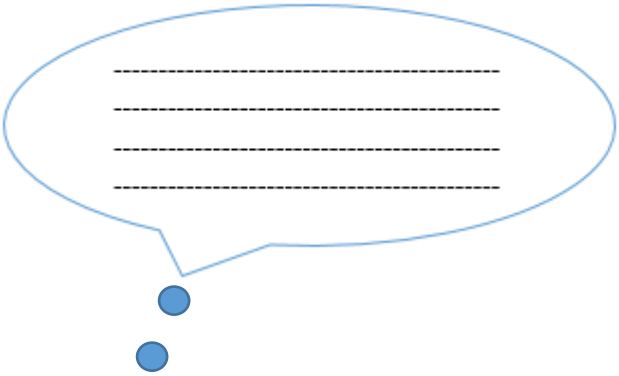
Purchase Based Scenarios:

Jane is walking past H & M clothes store when suddenly she receives a voucher on the phone….

How would she respond? (Please write your brief response below)

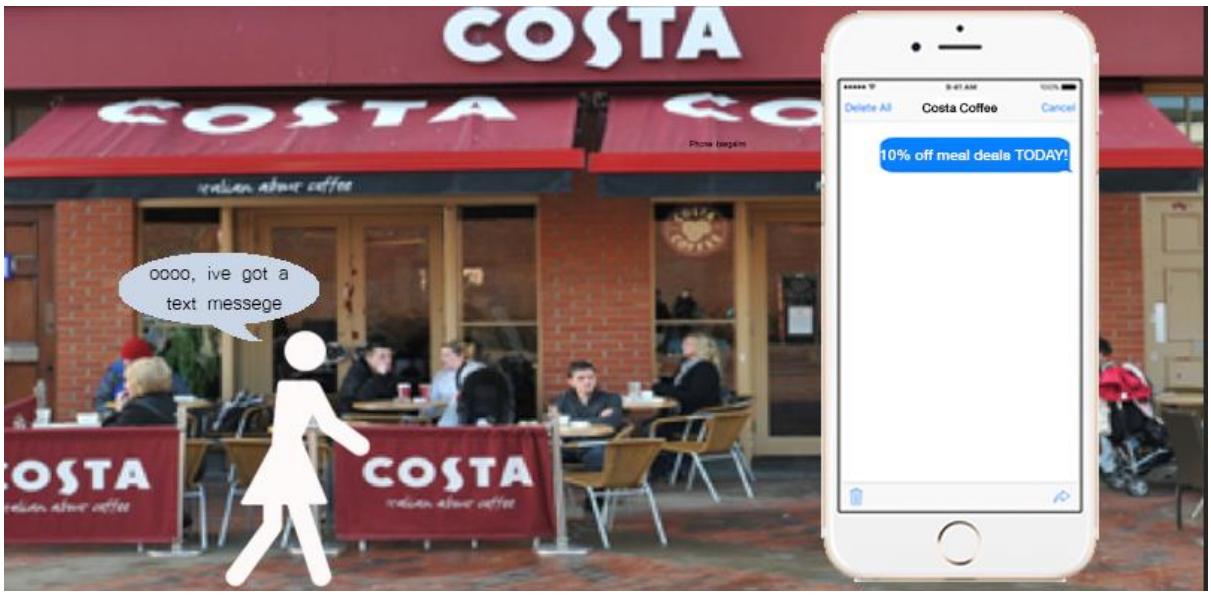
Jane is walking down a street on her way to University and as she passes Costa Coffee shop she receives a mobile message for offers for the month.

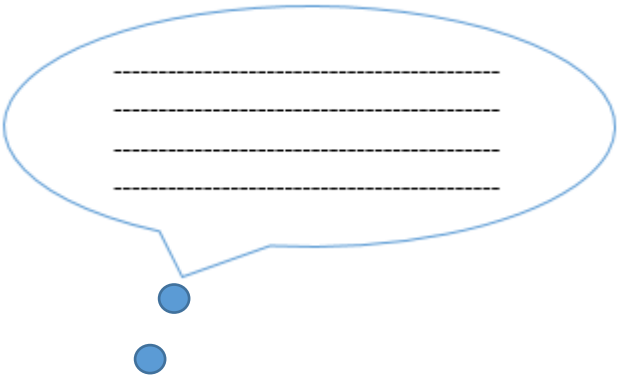




How would she respond? (Please write your brief response below)

Jane is walking down a street on her way to University and as she passes Costa Coffee shop she receives a message for offers for the day.





How would she respond? (Please write your brief response below)

Nando's Purchase based experience

Whilst browsing the menu at Nando's a customer receives a message from Nando's on their mobile device…

> Lunch hour special, half price off all platters today, first 20 customers. Hurry!

How would they respond?

Raising Interest/Engagement: Leicester Carnival

Whilst walking around town, a mobile message beeps suddenly about a forthcoming carnival festival in Leicester….

Ever thought of participating in the Carnival? Visit our website now using the link provided to find out more.

What is the customers' likely response?

Brand Experience: Leicester City Football Club Meet the Team

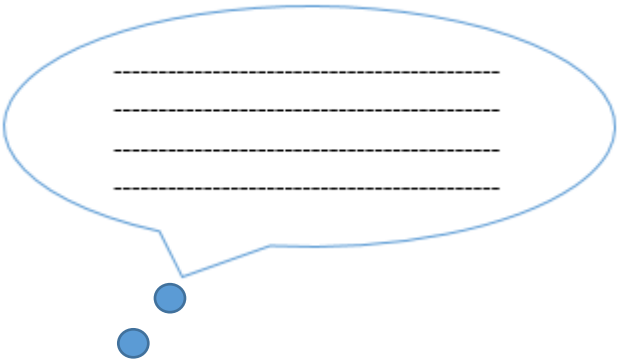
Whilst driving past Leicester city stadium someone suddenly receives a message on their mobile device…

> Fancy a chance to meet the Champions? Sign up today for the Leicester City e-fan club and download our app to be entered1 into a lucky draw!

How would they respond?

Travel Based LBS

Jane is at Leicester train station searching for fares to London when he suddenly receives a message on his mobile phone…



How would he respond? (Please write your brief response below)

Jane just arrived in Spain for a holiday for the first time, whilst walking out of the airport she launches an app on her phone asking…

What services would she choose from those listed on the Trip Advisor app?

Other Comments

Appendix 5: Transcript Examples from Cartoon Test

This appendix demonstrates how content analysis was applied to the cartoon tests transcripts staring with the scenarios and then the in-depth interviews. The chosen transcript is for respondent (R3CT) a young professional aged 30.

DE MONTFORT UNIVERSITY LEICESTER

(3)

Research Participant Information Sheet

My name is Shelton and I am conducting this interview as part of research into Location Based Services (LBS) and consumer lifestyles. I would like to understand user awareness, experience and motivations to use LBS. In addition, I want to identify how mobile lifestyle characteristics and situational context may influence response and choice of LBS. I also want to determine other factors that may influence behavioural response towards LBS. Your participation will provide much needed knowledge into consumer response to LBS. Information collected in this interview will be used only for this research and no personal identification information will be used during or after the interview. This project has been reviewed and approved in accordance with De Montfort University's ethics review procedure. I will require your voluntary consent to participate in this interview. Are you happy to be interviewed today?

Response: YES

Age: 30

Signed: SRMusamba

Date: 6/8/16.

Radiographer

Cartoons Tests

Purchase Based Scenarios:

Jane is walking past H & M clothes store when suddenly she receives a voucher on the phone....

Positive response

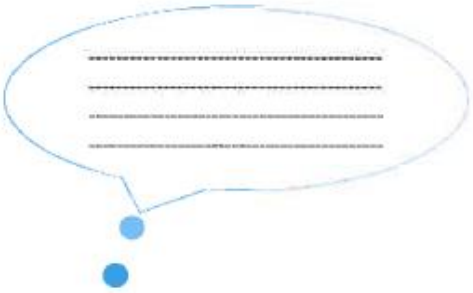
How would she respond? (Please write your brief response below)

Go in the H & M shop and buy the clothes she needs for going out. Might buy more expensive clothes as she would have received a 25% off voucher. Bargain!!!.

Spend more

Bargain

Jane is walking past H & M clothes store when suddenly she receives a voucher on the phone....



How would she respond? (Please write your brief response below)

Positive Response (same as for a month)

Same

Jane is walking down a street on her way to University and as she passes Costa Coffee shop she receives a mobile message for offers for the month.

Situation dependent — three unique situations

How would she respond? (Please write your brief response below)

Depends if she want a meal that day. Might remember to use the voucher within the month. likelihood she might forget. If however if she is hungry she might use it the moment she receives it.

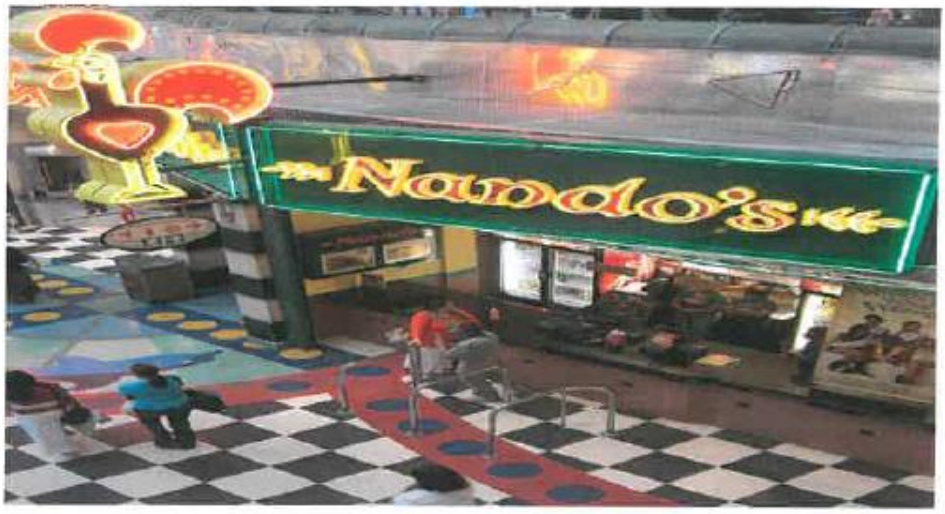
Jane is walking down a street on her way to University and as she passes Costa Coffee shop she receives a message for offers for the day.

How would she respond? (Please write your brief response below)

Situation dependent
need
discount

Might not use it if there is no need
Or she might just use it as there is a
discount

Nando's Purchase based experience



Whilst browsing the menu at Nando's a customer receives a message from Nando's on their mobile device...

> Lunch hour special, half price off all platters today, first 20 customers. Hurry!

How would they respond?

Situational / dependent
Could / would vary more ppl / company

If they are on their own - might not use the offer as it might be more expensive than just getting a single meal

If with company one might as well take advantage as they are already at Nandos and is likely to be one of first customers

(2) Place

6

Raising Interest/Engagement: Leicester Carnival

Whilst walking around town, a mobile message beeps suddenly about a forthcoming carnival festival in Leicester....

Ever thought of participating in the Carnival? Visit our website now using the link provided to find out more.

What is the customers' likely response?

negative response / No interest

- No interest - do not wish to participate in Carnival

Brand Experience: Leicester City Football Club Meet the Team

Whilst driving past Leicester city stadium someone suddenly receives a message on their mobile device...

> Fancy a chance to meet the Champions? Sign up today for the Leicester City e-fan club and download our app to be entered1 into a lucky draw!

How would they respond?

Negative response - ignore message

No response as there are several stages to the likelihood of eventually being the lucky person.

length of process - experience

Travel Based LBS

Jane is at Leicester train station searching for fares to London when he suddenly receives a message on his mobile phone...

Positive response

How would he respond? (Please write your brief response below)

Definitely use the offer.

Jane just arrived in Spain for a holiday for the first time, whilst walking out of the airport she launches an app on her phone asking...

Situation dependent

What services would she choose from those listed on the Trip Advisor app?

If she has not booked a hotel already, she might look for hotels first, also Restaurants or Things to do.
If she has a packaged holiday she might not be interested in the things on the app.
She might look for things near me just to know her surroundings because it's her first time

*Experience with travel related services

Other Comments?

Sikuahen

It depends with the situation ~~befo~~ one is under before they see the voucher whether they will use it immediately or ~~after~~. Whilst some vouchers have good offers on them they might not be useful everytime for everyone.

different response to offers

Vote of Thanks

Thank you very much for your contribution to this research, your views will be used to better understand the future and value of LBS and consumer attitudes towards the same. You detail will remain anonymous and information provided in this interview will only be used for this study. You may contact me using the provided email for any future questions about this study.

Interview 3

Date: 06/08/2016

Start: 3: 00pm

Finish: 3: 19 pm

Location: Hamilton, Leicester

In this interview, the Interviewer will be referred to as I whilst the interviewee is referred to as R (e.g. R3) depending on the interview count (number).

I: Ok, thank you very much for agreeing to take part in one of my interview for aah location based services and location based advertising. Basically location based advertising we are looking at any advertising that is done when people are on the move using their mobile phones, they get a message then they are responding to offers from retailers. Aah, it could have been an invitation to come to the shop or invitation to follow a particular event. So, I am going to talk to you about branding experience, value and the last section is on selfies. So if I may ask, what mobile phone brand do you use at present?

R3: i-phone 6 plus

I: i-phone 6 plus, ok that seems like one of the latest phones.

I: Have you always used i-phones or is it aah…

R3: First i-phone, I used to have Samsung

I: Ok, so you have been on Android and now you are on Samsung. So what do you think when you are comparing the two phones?

R3: umm, I think it's a matter of choice [choice ok] aah, I'm happy either way, you know I like the status of the i-phone, status

I: Ok, so lifestyle maybe?

R3: Yeah, more lifestyle.

I: Ok, so what do you use this phone for? Maybe as you get on with your life maybe everyday

R3: Aah. mostly I just use text messages, normal calling and WhatsApp, aah a bit of online shopping as well, if I need to search anything go on holiday. I search flights and things like that.

I: Ok, and aah, have you had of location based services, before today in the past?

R3: It's actually my first time to hear the term but through the concept [you have heard the term?], yes

I: And have you used them, any location based adverts before? Or any service, rather location based service?

R3: I have used it before at Harvesters [Ok, can you…], it was more like, I think it was more like I was in Harvesters and someone told me about getting an app then you get some vouchers and I used them then. And I have also used Burger King I think. When I get a discount, if you download an app [Ok] so I have used it twice.

I: So just to make sure I have got everything right, you went into Harvesters and you were told you can get an app and via you are able to get an app. Is that right?

R3: Yes

I: So, you did it right in the shop and got a discount?

R3: Yes

I: Ok, there are two, so both of them are based on food Harvesters and Burger King. Was it when you were within your local environment or you had gone to somewhere you do not know?

R3: I had actually gone physically to those shops.

I: The same area you stay in Leicester or had you gone outside Leicester?

R3: Aa, one of them was same area the other one was outside.

I: Ok, alright interesting, and aah, do you think location based services they vary depending on the brand. You said you have used an Android phone before and now you are using aah an i-phone. Aah, is there a likelihood that the services being offered are different depending on the brand of the phone?

R3: Aah, I shouldn't think so because both of them I had, I think still had an Android when I got them

I: Oh when you got to Harvesters and Burger King?

R3: It was on my Android, but I wouldn't think it will be different

I: You wouldn't think it will be different!?

R3: Yes

I: Ok that's alright. Some people have told me that they use these services when they are on the move, when they are travelling. Do you actually use them when you are travelling yourself?

R3: I would, because half of the time when you, kind of need a voucher [Yes] or need to make use of any offers usually it's more like spontaneous I think [Spontaneous, yes], yeah so it's most spontaneous so you would really appreciate it. So if I stop on the motorway, there is Burger King, KFC, there is offers I can use there and then [There and then?], yes so I think it's quite useful if it's like that.

I: So in effect you have not really used them much! I know you have said you have used them for Burger King and Harvesters. But when you are travelling have you also done the same thing where you stopping on the services or and you try and access location based services?

R3: Aah, I think maybe I haven't given quite the correct answers [Ok] is location based services just what you receive on the mobile phone or are you talking of even vouchers you receive physically?

I: Aah, aah today we'll concentrate with what you receive on the phone

R3: Ok, so yeah, those are the only ones I have used on the phone, I've kind of used physical vouchers that you get [Physical vouchers, ok], newspapers, certain locations, uum, like bus tickets. I 've used those kind of vouchers.

I: Ok, interesting, and in terms of aah, I know you said you would be travelling. Do you use GPS, navigation equipment?

R3: Ok, which brand do you use?

R3: I forgot, it starts with a G

I: Garmin?

R3: Yeah

I: And aah, do you use location services on that sat nav when you are driving?

R3: I haven't noticed although there is sort of like an application [Ok] there is somewhere where it says petrol station or food [Ok], or whatever. So I can physically press, so I don't think it's actually aah, spontaneously comes on that

I: Ok, so you have not used but you know there is a possibility you could use…

R3: Yeah, I might have used them but mobile phone, like just look for a MacDonald's nearby [Ok] I have done that.

I: Ok, when was the last time you did this do you remember?

R3: At, a month ago [A month ago?], yes

I: That's interesting, you said you have used apps, aah, before if you just refresh me which apps have you used. I mean which ones have you used in the last two weeks?

R3: Most of them are like you know work related, [ok] like an app for work, I have used that one aah, I normally try to go to the proper websites [you don't go to apps], I don't have a lot of apps [Ok], aah, I'm trying to think what other apps I have used recently umm, WhatsApp and things like that are apps aren't they? [Yes, they are apps], yeah so I have used those ones to, WhatsApp, Viber but in terms of other things mainly it's the sales. I try to go to the website so I'll go to Marks and Spencer website. I go to Next website even via mu phone I don't have a lot of apps downloaded.

I: Ok, so these apps that you use are they free or you have to pay for them?

R3: I usually use free apps.

I: Ok, you wouldn't pay, aah I mean given a chance?

R3: If there is an option for example a navigation, if I want to pay or one for free, I will download the free one.

I: Ok, and we you are now talking of your apps and lifestyle. So apps you use such as 'work related' WhatsApp and Viber are they different from your lifestyle or do you think they actually support your lifestyle and they match your lifestyle in a way?

R3: Aah, well yeah the reason I got to use them is because they are important in my lifestyle, umm, I've got to communicate with my family for example my family was abroad aah the other week so it was easier and cheaper to communicate by WhatsApp or Viber , I can also like for example my husband doesn't have Viber he's got Android so I use maybe Viber to make a call [Ok, to make a call], and then the 'Sales force' I need to check my shifts to make sure you know they have put me where I need to be working for the following weeks or months.

I: Ok, we are going to move to aah, also on lifestyle, some people told me they receive deals, or refreshments on their phones. Have you received any of these aah…?

R3: I have used like travel deals and sometimes I just look at them to see where they are [Where they are?], yeah aah, how much it is they I know that I can potentially for example go to Disney land France for this amount so sometimes I just use it as a knowledge base

I: Ok, and aah coupons do you receive coupons on your phone or pop ups at all?

R3: Oh yes I do receive some coupons from, I am on O2 as well. They are called priority moments [Ok,], so eh, I do get some vouchers on there.

I: So do you get them when you enter a specific location or you get them whether you are at home or?

R3: I think aah they come they refresh themselves so I just have to look, I don't normally look but I normally look on Monday between like 10 am to 3 pm [Ok] you can get umm, lunch for a pound from like Boots or WHS Smith so I know they are always there.

I: Ok, it's not really because you have gone closer to aah Boots or WHS Smith when aah you get them but they are always there, all the time.

R3: Yes.

I: Ok, that's interesting. I 'm just going to go the second from last aah, in terms of social factors. Some people have told me about location based services which they are using aah to link to places or vising places. Do you use any of the apps for social purposes such as to reach out to friends or communicate to friends?

R3: Umm, I don't think.

I: You don't think so, so things like Instagram you don't use that?

R3: No.

I: Foursquare? You don't check in?

R3: No

I: And do you know if some of your friends' tag stuff on their phones? Aah, do they tag material, sometimes they may take pictures and then tag them on a website. Do you know any of your friends who do that?

R3: [Laughs] Not really, I know it's done somewhere but no, I …

I: So I take it you don't have examples on your phone of that?

R3: No

I: Ok, alright and you said you have never tagged something on your phone. In terms of selfies, have you ever taken selfies and then you post them online? Because it seems like a trend, that many people are doing these days?

R3: Do you mean on WhatsApp or online?

I: Well, even on WhatsApp, yeah just using your phone

R3: Oh yes,

I: And the last question was about 'checking in' but you said you do not 'check in' even when you go to favourite places such as Nando's do you 'check in' to say I am in her or

R3: No.

I: You have never used that?

R3: No.

I: Ok, thank you very much I think that's all I wanted to find out today. Thank you very much for your time.

R3: You are welcome.

----------End----------

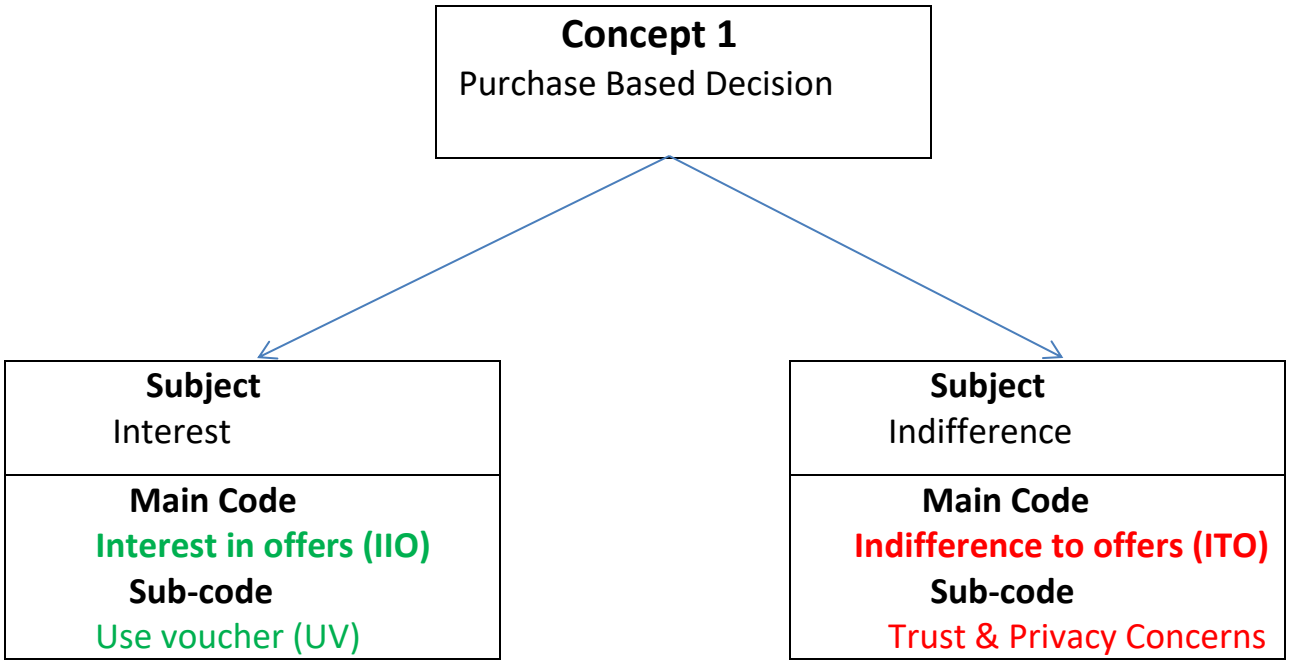
Appendix 6: Evidence of Coding

Table 9.4: Outline of Coding Process

Abstract/Thought	Related objective	Emerging Themes	Codes	Example Statements
Deciding on LBS message		**Decision making process for LBS** Ignore offer Clothing Ignore offer Recreation Ignore offer Food Delete offer Food Delete Recreation Checking offer Clothes Check offer Recreation Check offer Food Check offer Travel Assessing Value in Offers Make Enquiry	**DECMPLS** IGNOREOFCL IGNOREOFREC IGNOREOFFOD DELETOFFOD DELETREC CHECKOCL CHECKOREC CHECKOFOD CHECKOFTRAV ASEVO MAKE	*"No response as there are several stages to the likelihood of eventually being the lucky winner."* **[R3CTM-IGNOREOFREC]** **"***Oh let me go and have a look at the shop to see if there are somethings I want to buy."* ***[R17CTM- CHECKOCLO]*** *"She would look online first for the clothes on offer & enter the store, based on what clothes she's found interesting."* **[R11F- CHECKOCLO]** "*Delete – How many people have signed up to this and what are the chances of actually winning."* **[R18CTM- DELETREC]**
Responding to offers		**Response Patterns** Immediate Use Clothing Immediate Use food Immediate Use Travel Delayed Response Clothes Delayed Response Food Delayed Response Collective Social actions	**RESSP** IMMUSECL IMMUSEFOD IMMUSETRAV DELRESCLO DELRESFOD DELRESCOLSOA	"*I should go definitely go in and check the offer otherwise I will not be able to come back this week and the voucher is expiring in a week."* **[R7CTM – IMMUSECLO]** *"Same as previous response. During that month he's more likely to think of Costa Coffee as his first choice when he wants coffee.".* **[R1CTM-IMMUSEFOD]** *""Errr. Well, maybe keep it for later Maybe ask XXX (best friend) if they would like to come together."* **[R17CTF – DELRESCOLSOA]**

Abstract/Thought	Related objective	Emerging Themes	Codes	Example Statements
Factors influencing response		**Elements Influencing Response** Individual Preferences Recreation Individual Preferences Food Individual Preferences Travel Value of Travel LBS Value of Food LBS Value of Clothing LBS Situational Context Social Mobile Status Individual Concerns over Privacy Lack of value Brand Familiarity Lack of identification with brands	ELEINR INDPREFREC INDPREFFOD INDPREFTRAV VALTBS VALFODLBS VALCLOLBS SITCO SOCMOBS INDCOPRIV LOV BRANF LOIDEBRA	*"Depending on whether he has time or not or whether he loves coffee or not he would be tempted to get in."* **[R15CTM - INDPREFFOD]** "*Forget everything else, this Leicester City Football Team who are an inspiration and making headlines right now. She is likely to jump for the opportunity. Even people that don't like football, the Leicester Story is unique and people are more likely to respond positively. Unless there is some deep deep hatred."* **[R1CTM - - BRANF]** *"I WOULD INSTANTLY USE THE VOUCHER BECAUSE TRAIN TICKETS TO LONDON ARE TOO COSTLY, SO A 30% DISCOUNT WOULD REALLY REDUCE MY OVERAALL TRAIN FAIR."* ***[R4CTM - VALTRAVLBS]*** **"***SPAM – DELETE.- This is the kind of thing I expect to receive in my emails not text. Just don't have time to look into it and research it."* **[R18 - INDCOPRIV]** *"She would purchase tickets for London, as means She can get a good price on good time trains into London, as She was there already to buy train tickets."* **[R9CTF-SITCO]** "*Yeh! Sign! I want to meet the heros! (sic)"* **[R17CTF- SOCMOBS]**

Appendix 7: Coding Illustration



Example Quotes

"Jane will walk into H&M and look around for clothes and maybe use the voucher" **R2CTF**

"She might walk into store and browsing around for the items that she needs" **R8CTF**

" She would buy a meal deal as a limited time offer, and the café is close by meaning not for to travel and it meals and easier decision for lunch when offers given when walking past." **R9CTF**

" He will pass the shop and may be take up the deal later since it still has a month to go." **R10CTM**

"He will go and check out the deal. If it is worth the money he will buy." **R10CTM**

"She might ignore the store and walk pass" **R8CTM**

"Jane might look at the text and delete it." **R2CTF**

"**(Sic)** IN THIS SCENARIO I WOULD NOT GO THAT DAY SIMPLY BECAUSE THE OFFER IS VALID FOR A MONTH." **R4CTM**

Commentary

Most respondents expressed willingness when it comes to receiving location services on the move, with decisions tending to be on the type of location service (e.g. H& M clothes shopping; Costa Coffee; and Nando's Restaurant). There is a strong interest for money off deals on food overall with most respondents seeing value in offers. For example, **R10, R8, R9**, showing strong interest in using vouchers in all food based scenarios. In this situation, most of the purchases are quite immediate especially where the offer is for a limited period (e.g. Nando's offer for the first 20 customers). Conversely, offers valid for the month (e.g. **R4**) did not receive immediate interest hence vouchers not immediately used. In terms of clothing deals, there is also an indication of behavioural loyalty. For example, **R13** who investigates the savings before purchasing on the day and indicating a possible return within the month to make more purchases. In contrast and as expected, there is some indifference to random location services (e.g. **R8**, **R8**).

Appendix 8: Phase Three Transcript Example

Phase three of the study sought to establish consumer perceptions and the role of individual factors in consumer response. Three focus group interviews were conducted with three groups at different life stages to try and establish the above aim as well as triangulate results from earlier phases of research. The third focus group (mature participants) comprised six members (e.g. R1FG1M-respondent one focus group number one male). This group comprised young professionals in different job roles whose age ranged from 23- 32 years. The second focus group interview was conducted with students and there were five participants in this group (e.g. R1FG2M-respondent one focus group number two male). The ages of the students ranged from 22-28 years. The third and final focus group comprised older established participants in employment and with established families (e.g. R1MFG3M-respondent one male mini focus group number there). The ages for the older group ranged from 41-53 years. In this appendix, a transcript of the older group is presented.

I: Okay thank you very much for agreeing to come to this interview so as discussed I am trying to find out about your feelings your attitudes and also your lifestyles when it comes to using mobile phones for accessing products and services. so I've got four sections in my interview the first one I'll be talking about general app usage are the second one I'll talk about specifically about location based services. Aah, the third one I will be talking about lifestyle and the fourth one I'll be talking about life stages as well as risk, attitude towards risk. So to start off I just want to find out if you use location based services at all in your day to day life. It could be when you're doing your work shopping or anything that you do on a day to day basis. So do you use ups at all.

R1: Talking of myself I use location based services on a daily basis this is due to the nature of my job because of my job I have to look for locations where we can put cash machines.

I: yes

R1: That means that I have to use location services to find out also where the nearest takeaway is all the nearest convenience shop is and so forth. Soldier I just find that a time to just go to my mobile phones and find restaurants near me, restaurants and takeaways, supermarkets or retail stores near me or anything I am trying to look for which is easy using my mobile phone so, I use it on a daily basis because I'm travelling a lot so it does help me a lot to find nearest facilities, or where the nearest shop is and then I sort of towns to visit that place. So, it's a tool that I use quite often on a daily basis.

I: Okay so any particular app that you are using for that on a daily basis?

R1: Off course, most of it is the Google, Google app itself. I use the Google app itself because that's what we use to search anyway. On my app, I may not search the facilities itself on my iPhone but just search the Google so it's mainly the Google app that I use most of the times.

I: Okay how about R2 any....

R2: The same, Google app yeah that's the one I use.

I: And you're using it for?

R2: Locating like shops, restaurants and aah places I want to go.

I: Yeah

R2: We have been instructed to go so I have to locate different places, so I use that app almost every day? Yeah.

I: So is that Google apps?

R2: Yeah mainly.

R1: I don't know if you also consider if this is part of the subject there's another app called Cam Scanner. I don't know if it's part of this or comes under another subject.

I: Okay what does it do Cam scanner?

R2: Because Cam scanner I search somebody and I need information on them, instead of me typing in the location and let's say once I scan your idea right now it tells me I have scanned Shelton's ID at Starbucks in Coventry.

I: yes.

R2: So it gives the location of where our standard document so you have got a free version or paid version.

I: Yes

R2: So there is a paid version gives all the information by the free version doesn't give you everything just tells you that this can was taken at Starbucks in Coventry it can give you the location or the postcode. Let's say Ricoh arena Starbucks. So it's an app I use every day as well.

I: So specific coordinates

R2: Exactly so you have got a scanner.

I: So do you pay for that app?

I: interesting lots of free apps most of these I've never had about before, any ...

R5: I can say I use also true caller.

I: True Caller.

R5: Yes so when I get calls from people I don't know, you know these people call and say you have been involved in an accident so I always use True Caller to find out and I use like a block of those calls which I don't like.

I: Okay

R5: Yeah I think that's mostly what I use.

I: So quite a.....

R1: There is many apps like phone and pay and such as that.

I: Phone and pay is about purchasing ?

R1: Tickets let's say you don't have any cash when you or you go to you want to see where the nearest parking space is

I: yeah

R1: It shows you where the nearest parking space is so instead of you if you don't have any coins. So if you don't have any coins on you, it allows you to pay for parking via an app.

I: Okay

R1: Then it can locate you where you are and it can also tell you where the nearest parking spot is. Just asks you the location number where the parking is then you just enter it in.

R3: You don't get a ticket?

R1: You don't get a ticket because...

R3: You don't need to display?

R1: Yeah he don't need to display because it uses that system, so if the ticket man comes to your car the first thing to do is he just checks on that thing on the machine.

R3: Uuh

R5: That's clever.

R1: So there is certain times you see this car doesn't have a ticket and you go away when you come back there's no ticket it is because of the system for paying for parking.

I: so you have to register your car registration number.

R1: Yeah, you register your car registration so wherever you go to in the country.

I: Ohh even airports?

R1: Yes airports or anywhere, so whenever you go to the ask you good morning do you want to park your car using LV because they already have it on the database so if you have changed your car they will give you an option to update it. So you can say I want to change the car I want to register this car now. so you can register 3 to 4 cars if it's got multiple cars in your house it allows you to do that. it helps because sometimes you don't have cash on you all the time so it is a good app.

I: That's quite exciting because when I look at the apps that you are all using it seems they're helping you one way or the other maybe I should say as part of your job. Making it easy maybe to locate services, maybe identify callers are you trying to eliminate threats all risks as well as you are saying paying convenience; convenience in paying. But when you think of retailers, has anyone of you received these services maybe when you are sent adverts like when you are at Ricoh Arena. Get advert saying come to Costa there is10% off. Has anyone ever encountered one of these location services?

R4: Yes it was through Google.

I: So where was this?

R4: It was in Coventry but I don't remember the name of the shop. It comes up also through Google such as Google ads when travelling, For football.

I: okay so~~cer~~ football you have subscribed to that?

R4: No I didn't even subscribe I didn't even know how they got my number it just popped up.

saving around your home. So I always get information about comparing deals from other places.

I: You use that as well; okay any I mean any services you have received from retailers may be location services.

R4: Aah no not as such.

I: Maybe actually the one will start the process you look for the things.

R4: Yeah.

R3: To, to be honest

I: yeah

R5: Most of the time I don't travel a lot.

R3: To, to be honest eeh things that just pop up I mean I just don't respond.

I: Yeah

R3: It is only when I've got something specific that I'm looking for and I just don't accept deals randomly and things like that it's only when it is of utility value for me at a particular time and for a certain purpose. Yeah.

I: Okay.

R4: Whenever you're on Google you search for something I don't know how they do let's say maybe you're searching for bodyweight, they'll be a company that is like advertising slimming products so that if you click on the link it'll take you to the app.

R5: You know it's the same like certain websites, they come up using Google so every time when you are using Google the adverts just pop up, from every website that you visited let's say I read news from new Zimbabwe.com. Let's say I go to XT.com those adverts from NewZimbabwe.com just pop up.

R1: Ohh, they place what is called cookies.

I: Cookies oh yes.

R1: And one thing you need to watch out when you go on Google right actually something let's say when you search for, for the let me see what I want to show you if you see when cities come out it comes out within an Ad . That's advertising if you click on that one then it will be tracking your activities that's advertising. Then if you scroll down see some of them do not have Ad, so most of us we just click the Ad first.

R3: Then it tracks you.

R1: It's not showing but that's what it does most of the time when you click it shows.

I: very interesting insights about attitudes and awareness so when we're talking about these locations based services which most of you are aware; do you actually enable on your phone because on the phones there is a function to enable location. Do you actually enable location?

R3: Eeh, the trouble is if you download a certain app, for you to go ahead it will ask you to enable location.

R2: Yeah yeah you enable once.

I: Once yeah

R3: So that's it so that means you've opened your house to everything (laughs). You have just opened your house to everything and you know everything just comes. So that raises a bit of the concern over your safety because anybody can track you down.

I: Yeah.

R3: And sometimes this raises a bit of a concern in terms of safety, yeah because anybody can track you down just like even when you look at like True caller you know. If somebody searches for you, it reports that so and so is searching for you.

I: Umm.

R1: Really.

R3: Oh yes it does. If I start searching for you it'll register and say R3 is searching for you.

R1: You see what I mean!

R2: But when you are adding this app to your phone they aah, they usually have this question do you agree do you allow Google to access your contacts do you allow Google to access your camera.

R3: Yes.

R2: Do you allow; they ask you all types of questions and it's up to you to agree or not. You see.

I: Ok.

R1: The one which I find, is done in a subtle way if you say no then you will lose the right.

R2: Yeah that's right.

R1: So you have no option but to say yes.

R2: Yes.

R1: The other problem I find is it takes up a lot of battery life because it is running in the background so you have to disable it.

I: yes.

R1: So I try to disable it and then use it when I want to use that service because it takes up too much of battery life which means I have to keep my phone connected all the time but then with the type of work that I do it means I need to enable it 24 hours because I'm using it every hour. So that means my phone is always connected onto the charger because when I'm in the car I need to connect it all the time. But when I come out of the car I can't disable it because it will be running in the background and just finishes the battery so fast.

I: So concerns about battery life I think you raised something about concerns or something linking to risk. Are you worried about these apps getting your information is it about identity, transaction...

R3: I , I am really worried because wherever I'm going anybody would like to track me can track me where I am because with this location it can, people who know how to use these

things is thinking, they can easily spot the location exactly where you are and things like that and also personal details you know because somebody can actually steal your personal details you know. I am just a lay person I may not know how to protect myself from some of these aah you know tigers who were out there to you know so that's what I'm worried about my personal details and things like that.

I: Okay, anyone concerned about ahh...

R5: I think ahh this location, when this app asks about my location I see it as something that will protect me. Like I use banking app, so when I access my South African account they want to know my location, so that they can trace where I am.

I: Umm.

R5: And also some of the apps I use like trading they're for UK residents or Ireland residents so you cannot use it if you disable the location.

I: Okay.

R5: and they want to know that you are, you here.

R3: And the other thing, I don't know whether you realise there is, there I don't know but I have seen that where ever it goes it shows that I have been what is this place start, Starbucks.

R1: I know they use it, yeah.

R3: it is sure that I was at Starbucks at such and such a time it will show that I have been at this place at such and such a time. Again that can help like traceability if anything happens to me this phone can be a great asset to investigation to check where I have been, what I've done.

I: K so benefits in terms of safety and security.

R3: they, there you see it's a double thing you see, It's got benefits and ....

R2: yeah I think it is not much of the apps , because once the person knows your phone number that can actually trace your house and give the picture of your house at the same

time, you know the person is checking through your phone number.

R1: yeah.

I: so that's another reason..

R2: yeah forced it is actually forced.

R1: when I look at that as a Catch-22 situation because of what this gentleman have been speaking about. I like the idea of knowing where my daughter is if she's using one or where I am. So we've crime stories where crime happens and people don't know probably someone may try to say you were you at such and such a place when such and such a thing happened; it feeds through that. If you were in Coventry Starbucks because you live in Leicester, you were not even anywhere near Leicester when the crime took place. Which will help but then now the other issue now you've got invasion of privacy where you just want to be left alone.

I: You don't want to be bothered yeah.

R2: but then you have to make a balance now do you want to be left alone or do you want your whereabouts to be known. Then if you are in agreement then your whereabouts will be known.

R2: so that's the only issue I find because these apps are actually really useful when you use them, it is only when you don't need them that's when it becomes tricky.

R4: actually I don't disable my location .

I: oh you don't disable?

R4: I keep it on all the time, only reason that I do that is that there are some apps which keep running in the background so what I do is I disabled the app to know the location and keep other apps running.

I: Why?

R4: because most of the apps that run down my battery but most apps if I need it or if I don't need it at that time when I'm going out I disable that app.

I: okay so you just leave it on?

R4: for the settings of the app you know. So if I needed then I put it back on.

I: then you put it back on. Interesting insights so...

R1: just to add in some insights on the disadvantage is that they take up too much storage space device (others agree, yes, yes). Because they're downloading information and stuff on your mobile you will notice if you check this up I know this app which can take up to 380, 381 MB.

R2: Yeah.

R1: which is quite a lot for just one app. Taking more space on your phone.

I: interesting so in terms of this apps what role do you think they play in your life because you use them a lot so what role do you think they play in your lives. Do you want to elaborate on how they make your life easy?

R4: I think they make life easy because I find if I'm looking for a database I just go to the app and I click to the app and it will show me maybe this is at this location so it makes it easier for me to locate them to go to their offices one by one. I don't go to the app which I need and I just search for businesses around there.

I:So convenience is it something you do on a weekly ~~basis~~ on a monthly basis?

R4: almost everyday.

I; everyday okay, so it's your part of life day-to-day living.

R2: like online banking.

I: online banking.

R2; yeah it's been made very easy, yeah you do it whilst you sleeping (laughs), or by things whilst you're there for me to travel to go somewhere. Yeah you could just eat at home.

R1: I could say security issues ~~are~~ signed up to have simplified the day-to-day living, have simplified our day today leaving you don't have too, like this gentleman was saying, you don't need to leave

your home or call 118 and ask where can I find this service you just find it on the app. Yes it just makes it very easy.

I: so convenience. Do you all feel this am?

R5: because even now I can work from home using my phone, and access our database from work using my phone.

R4: another thing is I'm happy that you don't need to be typing the website, using an app you just click on it!

I: yeah one thump away.

R2: like Google you can just speak to it. .

I: yeah. And it?

R2: brings out the results

I: interesting.

R2: very very convenient. You don't have to worry about spellings hey (laughs).

R5: think also these apps.

R1: you see these apps that you using....

R3: because it may not recognise your accent(laughs)

R5: this app says well I think they are more secure unlike just going to the website if you use the apps I think it is more secure. So that you know those people like to steal your information may not steal it.

I: yeah.

R1: I think because I've noticed there's more security on the mobile phone than on the laptop,

I: yeah

R1: I think with mobile phones they put more data security on the mobile than your actual laptop or desktop.

I: Very interesting which takes me to my next point if you think about a student maybe they wake-up and every day they pass through Starbucks for breakfast and go to school and one day they receive a notification on the phone saying there's a 10% off and they go in and redeem the offer. Do you

think you'll do the same aah if there are apps you are using or shops you're passing through, maybe a restaurant which sends you a message at night each time when you're passing through.

R3: well for me, I I'd do not leave one impulse.

I: okay you do not live on impulse ok

R3:I, I it should be something that I'm looking for, it should be something that I want. Not just because I've just seen a flash message on the phone and I just follow on it, no.

I: so you have to plan do you actually...?

R3:I have got a family, have go to plan my life, I have got to have a budget. I don't want to go beyond aah, end up going beyond activities that I did not plan.

I: okay.

R3: no.

I: okay interesting.

R1:Aah myself I am more like R3, I am not an impulsive person. I do things when I want to so, I find it quite a distraction when I get a pop up on my screen. Saying there is aah ...when I need Starbucks I'll look for it, when I get there, aah so the thing is a lack of character. It reveals a lack of character of the dangers that when the pop-up comes it encourages you to do things you never intended to do. So like when you go to Starbucks it will trigger something and then you go and buy the coffee when it was not on your list.

I:Umm.

R1: so it is lack of character so I am more like R3.

I: oh okay.

R2: but on the other hand I find out that if you have such kind of aah pop-ups, they help you you know. it's like a reminder to you to say that if you go to such and such a place there is this thing happening you know.

I: yes

R2: happening you know or you're going to get a discount at such and such a place, you know.

I:Yeah

R2: so I find out that in theory, they are they can be a bit helpful in that sense. It's not that it's going to attract you at the same time that it arrives that you want to go there but it kind of remind you that such and such a place if you go near that place maybe they're having a discount or something or something is on offer or things like that yeah. So I still find that they are useful because they are actually direct you that there is something going on here.

I: that we have something okay.

R3: now talking of discounts what is discounts?

I: yeah.

R2:Aah because anything can be discount. Because somebody is selling something.

R2: yeah.

R3: they will tell you discount. Because what I know is that if a person is selling they are out there to make money they want to make profit.

R2: yeah.

R3: so for me if you say this is a discount price how do I affirm, how do I know that this is true because there's also this thing of buy one get one free.

R1: yes.

R2: yeah.

R3: is this true because obviously the price has already been worked out, if somebody says get one free is nothing like get one free because all the profits have been worked out and that person is not making a loss so this is just like something just to catch me with buy one get one free because everyone wants to get buy one get one free. So for me especially at my age I don't want just to be swayed by mere adverts.

I: okay (others laugh).

R3: who knows, is it true that I'm getting this one for free or simply you're not telling me the truth that this is what it is or you are just charging me and pretending that this is buy one get one free. You see!

R2: you know there's some aah, there is that aah myth that I know that people think there's a catch and aah but in most cases this type of sell it is not just to catch you must look at these things. the things that they are selling that plays like that there might that the things that they're saying buy one get one free maybe it is nearer the use by date and things like that so they're trying to clear out and bring in new stock so genuinely, it is a sale.

R3: thank you but, what is gonna happen because I'm seeing the pop up but I didn't plan to buy that which means the whole budget that I have its not going to be feasible now. Because something is just being brought in which was not budgeted for before.

I: yes.

R3: so that is exactly what I don't want to do to be swayed because in that way I become a impulsive in terms of my buying behaviour you see ~~sew~~ so I wouldn't want to and respond you see to that because that is going to force me to buy something that I did not intend to buy now if I want [redacted] something and I really want it for a good price I can still go and search. So it's me I am searching is not a pop up inviting me I know what I want,I search for it and I find it. I don't respond to this things.

I:So convenience is it something you do on a weekly BACs on a monthly basis?

R4: almost everyday.

I; everyday okay, so it's your part of life day-to-day living.

R2: like online banking.

I: online banking.

R2; yeah it's been made very easy, yeah you do it whilst you sleeping (laughs), or by things whilst you're there for me to travel to go somewhere. Yeah you could just eat at home.

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I: yeah one thump away.

R2: like Google you can just speak to it.

I: yeah. And it?

R2: brings out the results

I: interesting.

R2: very very convenient. You don't have to worry about spellings hey (laughs).

R5: think also these apps.

R1: you see these apps that you using....

R3: because it may not recognise your accent(laughs)

R5: this app says well I think they are more secure unlike just going to the website if you use the apps I think it is more secure. So that you know those people like to steal your information may not steal it.

I: yeah.

R1: I think because I've noticed there's more security on the mobile phone than on the laptop,

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R1: I think with mobile phones they put more data security on the mobile than your actual laptop or desktop.

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Appendix 9: Phase Three Coding Example

Table 9. 5: Coding Example

Theme 1a: Awareness and Experiences (Code: AWEX)	**Implications and Sub Codes**
*"Oh yeah, I think can I talk of my recent experience, my recent **experience is I think I was passing** by High Cross and I got an offer from Nando's. I don't know what they were saying like I think it's interesting so I guess food (some laughter from other respondents)." (FG1-R5, Young professional, Age --)*	Mobility experience
*"I would've said I don't use location based services but now that you've explained to me more I could say yes **I use location based services**. I do get them but I hadn't realized what they are." (FG1-R3, Young Professionals, Age-)*	Passive awareness
*"Maps so like sometimes when I want to go to go to a fuel station I just click on the app, I need to show **me the closest one, yeah**." (FG2- R1, Student, Age--)*	Active application (app) use
*"Aah so I will just make sure that **I don't click on every single thing that I see**! So yeah it's quite different for me all together. I would say **cautious and sometimes thinking about the retailer**, ahh what they want. So, on that side as well I think of it." (FG2-R4, Student, Age --)*	Active awareness (selective exposure)
*"We have different like ways to enhance location like different filters recognising colours like if you want to **show people where you are**, so for like if you're in Brazil it to have like a logo for Brazil so it'll be pretty if you're taking a video or something." (FG2-R3, student, Age --)*	Entertainment/Pleasure
*"Expedia. Sky scanner you can get to book **holidays**" (FG2-R1, Student, Age--)* *"TripAdvisor! Because I realise that wherever you are it will actually note where you are and start giving you information about good deals information on cheaper accommodation and something like that. I actually used that especially when I went for holiday with my family." (MFG, R3, Older Group, College Tutor, Age, 53)*	Holidays

Theme 1a: Awareness and Experiences (Code: AWEX)	**Sub Codes**
*"That means that I have to use location services to find out also where the **nearest takeaway is all the nearest convenience shop** is and so forth. …" (MFG3, R1 Older Group- Business Development Manager, Age --)*	Nearest Services
*"Because Cam scanner **I search somebody and I need information on them**, instead of me typing in the location and let's say once I scan your idea right now it tells me I have scanned Shelton's ID at Starbucks in Coventry." (MFG3, R2, Older Group, Accountant, Age--)*	Information Search
*"True caller well…if somebody **calls me I don't know their number I don't know their location** so the phone shows me the person's name and where you are calling from …and I know that eeh, eeh and I think this app is really useful for me and also what I do is if somebody calls me and **probably I need to go to the place where they are so through the phone I can be able to go to Google maps through that**." (MFG, R3, Older Group, College Tutor, Age, 53)*	Identification and Direction
*"It's an app that brings up mainly location, **it brings up small businesses around you** or whatever you want to **search on**. So for example if you called me and your business it will bring about small businesses around you. Then I also make use of aah Google, Google maps." (MFG, R4, Older Group, Entrepreneur, 40)*	Business Search
*"Oh there's another one which universities use aah, Unidays. Yeah they actually **send your deals**, the ones that are having sales every week so there are number of shops in high-street shops aah you know are having you sales every week. So **it lets you know how much you are saving every week and how much discount they are giving on their commodities**." (MFG, R2, Older Group, Accountant)*	Informing
*"There is many apps like phone and pay and such as that. Tickets let's say you don't have any cash when you or you go to you want to see where the nearest parking space is. It shows you where the nearest parking space is so instead of you if you don't have any coins. So if you don't have any coins on you, **it allows you to pay for parking via an app. Then it can locate you** where you are and it can also tell you where the nearest parking." (MFG3, R1 Older Group- Business Development Manager, Age --)*	Parking and Payment

Theme 1b: Attitudes (Beliefs Feelings-Code: ATT)	**Sub Codes**
*"I find them a little of an **inconvenience** sometimes, sometimes I find it a little bit invasive if I wanted an offer I would actively search for it myself okay. I don't want somebody else to link me with an offer or something." (FG1-R2, Young Professional, Age--)* *"really should I consider this link or it might bring an aspect of **inconvenience** in terms of virus and stuff so it just depends." (MFG3, R5, Older Group, Accountant, Age--)*	Inconvenience
*"...it helps because sometimes you don't have cash on you all the time so it is a good app...very, very **convenient**... you don't need to leave your home or call 118... you just find it on the app" (MFG3, R1 Older Group- Business Development Manager, Age --)* *"Oh there's another one which universities use aah, Unidays... So, **it lets you know** how much you are saving every week and how much discount they are giving on their commodities. (MFG, R2, Older Group, Accountant)* *"Because even now I can **work from home** using my phone, and access our database from work using my phone." (MFG3, R5, Older Group, Accountant)* *"I think they **make life easy** because I find if I'm looking for a database I just go to the app and I click to the app and it will show me maybe this is at this location so it makes it easier for me to locate them to go to their offices one by one. **I just go to the app** which I need and I just search for businesses around there." (MFG, R4, Older Group, Entrepreneur, 40)* *"yeah it's **been made very easy**, yeah you do it whilst you sleeping (laughs), or by things whilst you're there for me to travel to go somewhere. Yeah you could just eat at home." (MFG, R2, Older Group, Accountant)* *"...I don't have much time so I downloaded the BBC aap. So, it just says the news to your phone so when you click up it just gives you all the stories, **that's really convenient**." (FG2-R3, Student, Age)*	Convenience
*"I think first when that happened I was like how did you know I was here? that was the first reaction but I think **you just get used to it**." (FG1, R4, Young Professional, Age --)*	Adaptation

*"Well I get the train ones. about once or two a week. it's usually you get a message automatically, and **I feel covered for the next trip.*** *"Although what might **outweigh** that it's something that is really a good offer then I'll see (makes a strange noise to signal reaction to an outstanding offer, others laugh)" (R5FG1, Young Professional, Age --)* "*Yes and it gives me the picture of the location and everything so that's how are you is it. But now **because it's free it comes up with there is a pop up** message which at times can be so annoying it brings up some pop-up messages." (MFG3, R3, Older Group, College Tutor, 53)* *"But when you are adding this app to your phone they aah, they usually have this question **do you agree do you allow Google to access your contacts** do you allow Google to access your camera." (MFG, R2, Older Group, Accountant)* *"I do feel **they are invasive** but then again at the same time, I said actually **I will go and pursue that offer.** (FG1, R3, Young Professional, Age--)* *"No I didn't even subscribe I didn't even know how they got my number it just popped up. No because **I don't really subscribe** to it, the one that I subscribe to I check the adverts. So the one I didn't subscribe to I was wondering how did they get my details and such things. **The ones I subscribe** to is like there's a small shop like a lady's salon, they send me a message that we are doing like four months' promotion this week we are doing this and that, £3.5." (MFG, R4, Entrepreneur, 40)*	Trade-offs Subscription
*"Eeh, the trouble is if you download a certain app, for you to go ahead it will ask you to **enable location**." (MFG3, R3, Older Group, College Tutor, 53)* "For you to actually access things like that you will have ***actually agreed*** for them to actually access your location." *(FG1, R4, Young Professional, Age--)* "*Because there is clipboard, you can actually collect what you want to have for example you can select different travel things, business and then just **select your personal travel things and only those news will come**. (MFG3, R1 Older Group- Business Development Manager, Age --)*	Permission Personalisation

*"Absolutely as long as **I am in control** and I can benefit from it and I can make a decision then absolutely… why not, it is on my terms I can control them. Don't harass me when I'm not interested (others laugh). You know that's what it is that's why I have a club card because I want them to send me **offers according to my purchase habits**." (FG1, R2, Young Professionals)*	
*"Yeah as long as it is **relevant**." (FG1, R1, Young Professional, Age--)*	Relevance
*"But on the other hand I find out that if you have such kind of aah pop-ups, they **help** you, you know. it's like a **reminder** to you to say that if you go to such and such a place there is this thing happening you know you're going to get a discount at such and such a place you know. So, I still find that they are **useful** because they are actually direct you that there is something going on here." (MFG, R2, Older Group, Accountant)*	Reminder/Usefulness
*"So for me if you say this is a discount price how do I affirm, how do I know that this is **true** because there's also this thing of buy one get one free. Who knows, **is it true** that I'm getting this one for free or simply you're **not telling me the truth** that this is what it is or you are just charging me and **pretending** that this is buy one get one free. You see!"* (MFG3, R3, Older Group, College Tutor, 53)	Distrust
*"Aah, sports direct you know their products come from China written already reduced price. But **they never reduce that's the normal price** that they are charging. It's just those stickers which say sale, sales they come straight from China manufacturer themselves. So I don't believe in what they say that...* *because it's on sale everyday 365 days a year (others laugh)." (MFG3, R5, Older Group, Accountant)*	
*"So you tell me I know what I Wanna eat, if I want to eat it is Zizis' I would tend to want to eat it Zizis', **I wouldn't be tempted** by an offer that someone sends me... I don't even open them. (FG1, R2, Young professional, Age--)*	Indifference
*"Yeah, no I rarely respond, I couldn't tell you a time when I responded to a text message, when I received an file when I'm out shopping and it says or do this or do that. I don't think I've ever had… if it straight from the shop **I just ignore it**, yeah." (FG1, R2, Young Professional, Age--)*	

Theme 2: Motivation (Code: MOTIV)	**Sub Codes**
*"So I just find that a time to just go to my mobile phones and find restaurants near me, restaurants and takeaways, supermarkets or retail stores near me or anything I am trying to look for which **is easy using my mobile phone**" (MFG3, R1 Older Group- Business Development Manager, Age 47)*	Ease of use
*"So yes if it's something about cats I'll click it because it's something that I think I am **interested** in just to get back to the point (laughs). (FG1, R3, Young Professional, Age--)*	Interests
*"Something like overselling so if it is not of **interest to me** then I will ignore it." (FG2, R6, Student, Age-)*	
*"So I think it's anything to do with the **gym or yoga** or something like that…" (FG1, R2, Young Professional, Age-)*	
*"And I also feel some of these messages that you get it's got an **emotional attachment**. Such that when you say like okay for me it is shopping not food." (FG2, R5, Student, Age-)*	Emotional attachment
*"At the moment, I like to travel so **fussy deals** that would be amazing." (FG1, R2, Young Professional, Age-)*	Deals
*"I do but most of the time it's like **buying stuff on promotion**." (FG2, R2, Student, Age-)*	
*"Sometimes I receive **offers** like from stores like JD sports so I'm **more into offers** like clothes so sometimes they text me like clothes and text me like if it's the weekend I should visit no matter like if you don't need to close it is always optional like you can go and buy...Okay like the Nandos ones, **you get free like one point**, then KFC as well, to get a **free chicken** as well, you need 12 aah tickets to get five point (FG2, R1, Student, Age-)*	
*"It is only when I've got something specific that I'm looking for and I just don't accept deals randomly and things like that it's only when it is of **utility value** for me..." (MFG3, R3, Older Group, College Tutor, Age --)*	Utility Value

*"So I try to **disable it and then use it when I want to use** that service because it takes up too much of battery life which means I have to keep my phone connected all the time but then with the type of work that I do it means I need to enable it 24 hours because I'm using it every hour… So that means my phone is always connected onto the charger because when I'm in the car I need to connect it all the time.." (MFG3, R1, Older Group, Accountant, Age-)*	
*"Yeah the same here just **emails and news,** yeah occasionally the **gym**. it gives you like different routines like you may start with stretching yeah there are different types of machines at the gym, so it tells you which one to go to and sometimes you want to go for really specific routines, If you want to work on your leg muscles or you want to go well, by just different routines like that." (FG2, R3, Student, Age-)*	Recreation
*"Like our one I particularly use this day is like if you're on the training, **dieting it keeps track of what you eat and the calories you ea**t, so you just take a picture and it tells you everything. And it also tracks your diet." (FG2, R2, Student, Age-)*	Healthy lifestyle
*"There is a similar thing you, know the **Facebook safety checking thing**, …that if you're somewhere where there's disaster then Facebook says do you want to mark yourself as somewhere safe, have you heard of that? (FG1, R1, Young Professional, Age-)*	Security
*"I now know that this number has been rated by so many people as **spam** and I know that eeh, eeh and I think this app is really useful for me…I think they are **more secure** unlike just going to the website, if you use the apps I think it is more secure. So that you know those people like to steal your information may not steal it" (MFG3, R5, Older Group, Accountant, Age--)*	
*"I think ahh this location, when this app asks about my location I see it as **something that will protect me**. Like I use banking app, so when I access my South African account they want to know my location, so that they can **trace where I am**." (MFG3, R5, Older Group, Accountant, Age --)*	Protection
"*It is sure that I was at Starbucks at such and such a time it will show that I have been at this place at such and such a time. Again that can help like **traceability** if anything happens to me this phone can be a great asset to investigation to check where I have been, what I've done. (MFG3, R3, Older Group, Accountant, Age --)*	Traceability

*"I like the idea of **knowing where my daughter is** if she's using one or **where I am**. So we've crime stories where crime happens and people don't know probably someone may try to say you were you at such and such a place when such and such a thing happened; it feeds through that. If you were in Coventry Starbucks because you live in Leicester, you were not even anywhere near Leicester when the crime took place. Which will help but then now the other issue now you've got **invasion of privacy** where you just want to be left alone. (MFG3, R1, Older Group, Business Development Manager, Age --)*	Privacy Concerns
*"Yeah some people say the government…you know like Snapchat there is a function which you can see and people say is the **Secret Service** sort of…so like face recognition you get your photo there, some is like a iPhone they have got like fingerprint recognition. (FG2, R3, Student, Age--)*	
*"I am really worried because wherever I'm going anybody would like to **track me** can track me where I am because with this location it can, people who know how to use these things is thinking, they can easily spot the location exactly where you are and things like that and also **personal details** you know because somebody can **actually steal your personal details** you know. I am just a lay person I may not know how to protect myself from some of these aah you know **tigers** who were out there to you know so that's what I'm worried about my personal details and things like that. (MFG3, R3, Older Group, College Tutor, Age 53)*	Tracking Concerns
*"Even Uber checks you five minutes after you left a car, they are **tracking you**, they're saying it's a safety thing." (FG1. R1, Young Professionals, Age --)*	
*"But you know the aspect of trying to consider **some risk** you know maybe like clicking stuff like that I don't know like if it easily like clicks onto your mind like really should I consider this link..." (FG2, R5, Student, Age--)*	Risk Concerns
*"And it annoys me with a **sense of insecurity** because sometimes my phone rings and I am like what and then a knock." (FG1, R2, Young Professionals, Age--)*	Insecurity
*"Aah, to be honest if all idea **just creeps me off**! Like when you're on your phone and then the next thing you just say something like you just see a message." (FG1, R5, Young professionals, Age--)*	

Theme 3a: Response & Life stage (Code: RELIST)	**Sub Codes**
*"So for me especially **at my age** I don't want just to be swayed by mere adverts… I have **got a family**, have go to plan my life, I have got to have a budget. I don't want to go beyond aah, end up going beyond activities that I did not plan." (MFG3, R3, Older Group, College Tutor, 53)*	Age
*"Yeah I think apps came to me when I'm that **a little bit older**. They came to me later on in life that I can easily cope without them." (FG1, R3, Young Professional, Age --)*	Age
*"I think they are different **life stages** and different needs and different purposes... and I think why you use them is it doesn't matter why you use them and how you use them but it's important to an **individual**…depending on the life stage…I am trying to arrange a **hen do** at the moment and I like, I tried the traditional way via email and I got bored and I am now using a WhatsApp group." (FG1, R2, Young Professional, Age --)*	Life stage
*"No ahh, to be honest I don't like that either and I don't like as a certain **age** I'm. like now when I go on Facebook in between stuff I get adverts relating to **ovulation** or pregnancy test just because they know I am 32." (FG1, R3, Young Professional, Age 32)*	Age
*"Personally, I think because if I have **family** or something like that then providing for them in terms of something like food seems to be more important but as I say I think it depends on circumstances." (FG1, R2, Young Professional, Age --)*	Life cycle
*"…as a **man** I think those pop-ups they don't work because. Aah I use like the banking app, there is always like the discount offers but I just ignore them and they are not based on my lifestyle. so I just ignore them I don't use them. But when it comes to another gender,let's say **women**, if they see an email or a pop-up saying sale, they always push us, they do…" (MFG3, R5, Accountant, Older Group, Age --)*	Personal factors
*"And just to add on to what R3 was saying the good thing is we are all **men** and Mary dear I don't know if you've seen this trend with our **wives**. That way its sale it makes them crazy even if this said whilst driving." (MFG3, R1,*	Personal factors

Older Group, Business Development Manager, Age --) *"when you talk of our John Lewis you know you're talking about **real fish** isn't it that you have money but when you talk of Primark you're talking about a bargain isn't it so it depends…" (MFG3, R3, College Tutor, Older Group, Age 53)*	Personal factors
Theme 3b: Situational Decision Making (Code: SITDEC)	**Sub Codes**
*"**Sometimes** if I'm not so bothered maybe I click on it and I scan to find the **expiry day** and that's it…it's actually a good thing **if I'm thinking about somewhere to eat** for example and then I see some an offer that kind of sways my **decision**…" (FG1, R1, Young Professional, Age --)* *"I think it depends on a variety of reasons. The **length of journey** **who I am with** and what not. So I think it depends on those types of factors that will influence my decision I don't really know… it will depend on how frequent you get them" (FG1, R2, Young Professional, Age --)* *"I don't like adverts when I'm listening to the radio that's really **into the groove** well how all long did that I think text to last well like **if you're listening to radio debate or a podcast**… so you don't wanna do it in **London** when you're in **Leicester**… but when I'm in London I do." (FG1, R3, Young Professional, Age --)* *"It depends with the **time**… **when I'm driving**." (FG2, R1, Student, Age --)* *"It depends it depends on the situation itself for example **if I am hungry** I'll respond to it but if I'm not I'll just ignore that ahh. (FG2, R4, Student, Age --)*	Timing Situational Decision Making Social Factors Timing Timing Location Timing Timing
Theme 4: Branding (Code: BRAND)	**Sub Codes**
*"iPhone, **iPhone yeah** (all laugh), I'll jump but if it's something that is not within my right then I will I just won't respond." (FG2-R6, Student, Age--)* *"Sorry just a matter of choice because myself personally I still need to be liberated from that because if I go shopping my wife will look for the cheaper things but I get attracted by **brands** (all laugh) saw like if I want it and*	Brand Knowledge Brand Knowledge

*that's what I was looking for I will buy it but it needs to be a brand (laughs) and the **quality not just the brand but the quality** as well so I will not go for the cheapest thing so you may go and look for a T-shirt and white T-shirt but I'll look on the brand and the quality." (MFG3, R1, Business Development Manager, Age --)*	
*"I think the **brand** always a big part Yeah. When you go shopping it's usually about the brand you are not really worried about the price, it's usually the brand. the thing is somebody can come with a **Gucci** or whatever but because it's Gucci I can sell it to you for a bigger amount. You know than what you could buy from somewhere else just because of the **name**. You see!" (MFG3, R2, Accountant, Age, --)*	Brand Knowledge
*"Because I feel quite **secure** and I'm used to **familiarity**. so familiarity is important for me when I'm gonna invest in something." (FG1-R2, Young Professional, Age--)*	Brand Knowledge Brand Knowledge
*"Well if **Starbucks** messages me saying that have got a new flavor latte I will be like I am there. I need to go and try this out." (FG1-R3, Young Professional, Age--)*	Brand Knowledge
*"I'll got back to travel and the **brand that I know like Thompson**." (FG1-R4, Young Professional, Age--)*	Brand Knowledge
*"The thing is **brands that are not delivering** on their service are not going to affect me unless I decide to follow through on the offer." (FG1-R2, Young Professional, Age--)*	Brand Trust
*"Like if it is a **well-known brand** you can take risks but if it is an **ordinary brand** you don't know what to expect because it's not a brand you trust, you can sign up with them as well and you hoping that they will protect you."*	Product Quality Brand Knowledge
*"So anything **pretty nice** it doesn't matter like how much it cost. But once I see like even if it is 30% you wouldn't look like that's 30% calculating it but you will be like this is awesome…of course there are those **brands** which when I see on offer I get excited, but if I see atmosphere on offer and all that I am just like no" (FG2-R5, Student, Age --)*	Brand Knowledge
*"I wouldn't because it's **Samsung**, sorry I don't think that's helpful but if it was for **Apple** I would go in and ask them to tell me more about the offer." (FG2-R3, Student, Age --)*	Brand Knowledge
*"you feel like if **Samsung** offers me a phone, even if that's cheap I don't think I will buy it first of all." (FG2-R4, Student, Age --)*	Brand Knowledge

*"I think it makes a **difference** when you look at **Matalan and compare to House of Fraser** clothes are like a lower **price**. So I will respond better to House of Fraser than Matalan. It comes to phones it depends if this version being offered is a **step higher** than what I currently have." (FG2, R2, Student, Age--)* *"I have reached a point where you getting a **Samsung** or upgrading to an apple it doesn't really matter, Samsung 7 plus or 10, it doesn't matter whether it's that or this cheap one or the last version. For me it's like getting the **brand** and getting myself to feel that I have a brand." (FG2-R5, Student, Age --)*	Brand Knowledge-Indifference
Theme: e—lifestyle motivating Response (Code – ELIM)	**Sub Codes**
*"…due to the nature of my job …so, I use it on a **daily basis** because **I'm travelling a lot** so it does help me a lot to find nearest facilities, or where the nearest shop is and then I sort of towns to visit that place. So, it's a **tool** that I use **quite often on a daily basis**." (MFG3, R1 Older Group- Business Development Manager, Age --)*	Routine use
*"You know if someone says to me tomorrow you're not going to have an app, an app, well that's fine with me I'm not going to revert to picking up a newspaper and reading which I do actually I do quite miss it. But that sounds weird because I **read the news now on my phone**." (FG1, R2, Young Professional, Age --)*	Wired lifestyle
*"So I think it's all moving like to **online digital thing altogether**, yeah that's all I would like to say."(FG2, R4, Student, Age --)*	Digital Lifestyle
*"Yeah, yeah I think they **aid my lifestyle**…because I'm so busy, just information you find it more accessible it's at hand… it does **support my lifestyle**…if I reach where there is free Wi-Fi, I **check -in** … I think it's like dump me down a little bit I don't know how to read a map…. like if tomorrow I do not have it on me; I ain't going nowhere, because I'm so **reliant** on Google maps or Tom-Tom to navigate... I **used patient line a lot which is an app**, because I self-diagnose before I go to the doctor." (FG1, R2, Young Professional, Age --)*	Lifestyle Check-in Reliance e-healthy lifestyle
*"Yeah it's like on **smartphone** as well you can use Word as well like Microsoft you can make notes and you can put time your timetable on it and you can **set reminders** just to remind yourself and not as well or anything you want.*	e-lifestyle

(FG2, R1, Student, Age--) *"yes something like a **Nike app**. Like for your **workouts**." (FG2, R3, Student, Age--)*	e-lifestyle
*"Actually there's been a study recently about how it is **inhibiting** our own problem-solving ability…sorry if I don't know something now, I **Google it** but before I used to try and work it out." (FG1, R3, Young Professional, Age --)*	e-lifestyle
*"I went to Tokyo I **checked in** there, Abu Dhabi I checked there when I went to London because I lived in in Scotland. It was convenient so I just checked in. it depends if you are on holiday you just tell people the first thing that I am in this country. in this city and you can just check-in in a hotel with a picture to tell them what I am doing. I am enjoying working…check-in every time because you do different things." (FG2, R1, Student, Age--)*	Checking-in
*"Well I **tend to**, I wouldn't do it if I just suddenly on a Saturday morning go to a Starbucks, or something. It's got to be if I went **somewhere** I have never been or really exciting." (FG1, R3, Young Professional, Age --)*	Checking-in
*"My Messenger, if you Wanna catch a **train**, I go onto the app look at the times if I want to know whats up with that app on my phone that summarizes all the **news** from me. In services sources that I select; if I want to know the **weather** I look it up on my phone you know it's just all there." (MFG3, R3, College Tutor , Age, 53)*	Needs Interests
*"Mine tend to be for **concerts** and **live shows** … so I don't know what I would do without my apps and I go on like Snapchat, Timehop… **it looks back** to anything you say on social media up to that day." (FG1, R1, Young Professional, Age --)*	Entertainment Timeline
Theme: Response Pathways (Code – RESPAT)	**Sub Codes**
*"Not straight away sometimes you just say well I will **respond later**." (FG2, R3, Student, Age--)*	Delayed Response
*"I am a very **skeptical** person and I don't want to be rushed into things so I will prefer the one that lasts for **a month.** So I can do more research." (MFG3, R1, Business Development Manager, Age--)*	Delayed Response & Comparisons

*"You can **compare** that offer with the market maybe everyone is offering promotional voucher and that company's just selling it as it is." (FG2, R1, Student, Age--)*	Comparisons
*"I don't want to be swayed because in that way I become **impulsive** in terms of my buying behaviour you see saw I wouldn't want to and respond you see to that because that is going to force me to buy something that I did not intend to buy now if I want if I want something and I really want it for a good price I **can still go and search**." (MFG3, R3, College Tutor , Age, 53)*	Cautious Response
*"...me I **watch out for pop-ups** so for me depends on the kind of products I want to buy, maybe I want to research for products, is not like small, small products maybe like our I'll search for like Tesco's, or from Next or from Marks & Spencer to look through their sale and I want to **resell** it on another platform." (MFG3, R4, Entrepreneur, Age, 53)*	Selective Response
*"I don't know like if you receive to receive something and just chatting about it to **your friends or colleagues** wherever. Obviously they have their own viewpoints or they are all experienced about that product or what they think about the brand. But that **does reflect on our decisions as well**." (FG2, R4, Student, Age--)*	Social Influence
*"Yes I would say if I was to get a message from a **friend** to say check this out this something going on in town tomorrow maybe I will give it a thought. If it's like that and it's coming from them then I **might end up going** but to an extent." (FG2, R6, Student, Age--)*	Social Influence
*"Maybe if I am **walking around with friends** and I get a message a look at it probably and there's a high chance that what that **we're all going to go there**." (FG2, R2, Student, Age--)*	Social Influence
*"Usually go for **the day**, yeah because they think tomorrow it's not going to be there let me go and buy it that's why you find those cells that they do at aah, aah, I think it's Next." (MFG3, R2, Accountant, Age --)*	Immediate Response

Appendix 10: Applying the Netnographic Elements

As previously stated, this research is not immersive hence only some of the elements of netnography were observed in the online observation process. With regards to planning and preparation for the netnographic process, Creswell (2013, p.167) recommends an eight-pronged series of steps to be followed; just six of those steps were used here. Alternative processes are offered by Kozinets (2015) who writes in his redefined netnography book, proposing 12 processes to be followed in achieving objectives of online observation. These stages are represented as a spiralling shell with multiple levels of inter-penetration, interaction and iteration (Kozintes, 2015, p.97); introspection, investigation, information, interview, inspection, interaction, immersion, indexing, interpretation, iteration, instantiation and integration. Previous studies (see, Bryman et al., 2015; Creswell, 2013; Bryman, 2016; Bowler, 2010) have recommended the 5-stage process put forward by Kozinets (2010) which offers a succinct guide to conducting netnography. These stages are derived from ethnography and they are: research planning, entrée, data collection and analysis, interpretation, ensuring ethical standards and research representation. Based on these ethnographic procedures and objectives of this study; applicable methodological steps and stages recommended by Kozinets (2010) are highlighted in this appendix (See Table 9.6).

Table 9.6: Outline of the Netnographic Process

I.	**<u>Entrée</u>:** In this research the researcher formulated research questions and moved on to identify an appropriate online community or forum suitable for addressing research questions using online search engines. Kozinets (2002, p.5) proposes that the chosen online community to be investigated should: (a) be more focused and possess segments, topics or groups relevant to the research question, (b) have higher volumes of postings, (c) constitute larger numbers of distinct messages posters, (d) contain rich data/more descriptive, (e) carry interactions between group members focusing on the research question. In addition, the researcher must learn as much as they can about the forum group as well as individual participants.
II.	**<u>Data Collection and Analysis</u>:** two types of data; copies of computer-mediated online member communications and the researcher's reflective notes capturing information on group members; interactions, meanings and emergent themes. As part of data collection and analysis, online members of select sites are classified contingent upon extent of involvement with the online community: Previous studies (Kozinets, 2010) used a three pronged classification '*Tourist'* who had relatively weak ties and interest with the group; '*Mingler'* exhibited strong ties but weak interest in the consumption activity; '*Devotees'* had strong consumption interests but have minimal attachment to the online group; and '*Insiders'* who had both strong ties and consumption interests in the group. 'Insiders' are well established and referenced members of the group (Kozinets, 2010).
	Arruda-Filho et al., (2010) used a fourfold classification of mobile phone users' social behaviour; 'Innovative Users' (first to own the latest technology and purchase the device for hedonic purposes only), 'Techno-Social Users' (show high devotion to the brand as well and choose the brand for hedonic purposes), 'Utilitarian Users' (use device for communicative needs), and 'Apple Users' (Apple acolytes who use latest technology). However, this study identified three distinct groups: 'Involved' group is very knowledgeable about LBS, highly active and influential assuming the role of a 'prophet'; with a vision of what is going on. The second group, the 'Observer' had limited expertise of LBS, posted minimal content, very argumentative and had very few followers. The third group, the 'Transactor' (transaction oriented) asked lots of questions (seeking advice), and made irregular posts to the forum. Kozinets (1997, 2002; 2010; 2015) recommends use of reflective field notes

	throughout the data collection process. These are pivotal in contextualizing the data. Furthermore, software solutions (e.g. QSR NVivo and Atlas.ti qualitative packages are recommended) can be used to make the coding, content analysis, data linking, and data display ad theory building with relatively ease (Kozinets, 2002, p.6). In this study, data analysis started manually and then qualitative analysis software (NVivo 11) was used due to overwhelming amount of data as recommended by Bryman and Bell (2015).
III.	**Interpretation;** the researcher is called upon to provide trustworthy interpretation of online data but focusing not on the individual(s) per se, but on emerging behaviour (decontextualizing conversational acts). Secondly, communicative acts of an online group are prone to bias and misrepresentation as opposed to observed offline acts of consumers. To mitigate this, Kozinets (2002) advises researcher's to clearly state their limitations in this regard to avoid generalizations of results to groups/ communities other than ones being studied.
IV.	**Research Ethics:** Online ethical guidelines centre on (1) whether the online forums should be considered private or public, (2) what constitutes informed consent online, (3) Doing no harm online by revealing *"personal or cultural secrets, and hurtful portrayals of culture members"* (Kozintes, 2015). Just as in use of traditional offline methods, online observation with elements of netnography presents similar ethical concerns such as privacy, confidentiality, and consent: researchers should consider these issues carefully. Kozinets (2015) also refers to the Internet Research Ethics (IRE); a growing sphere of inquiry guiding online research conduct or internet based environments.

Commentary

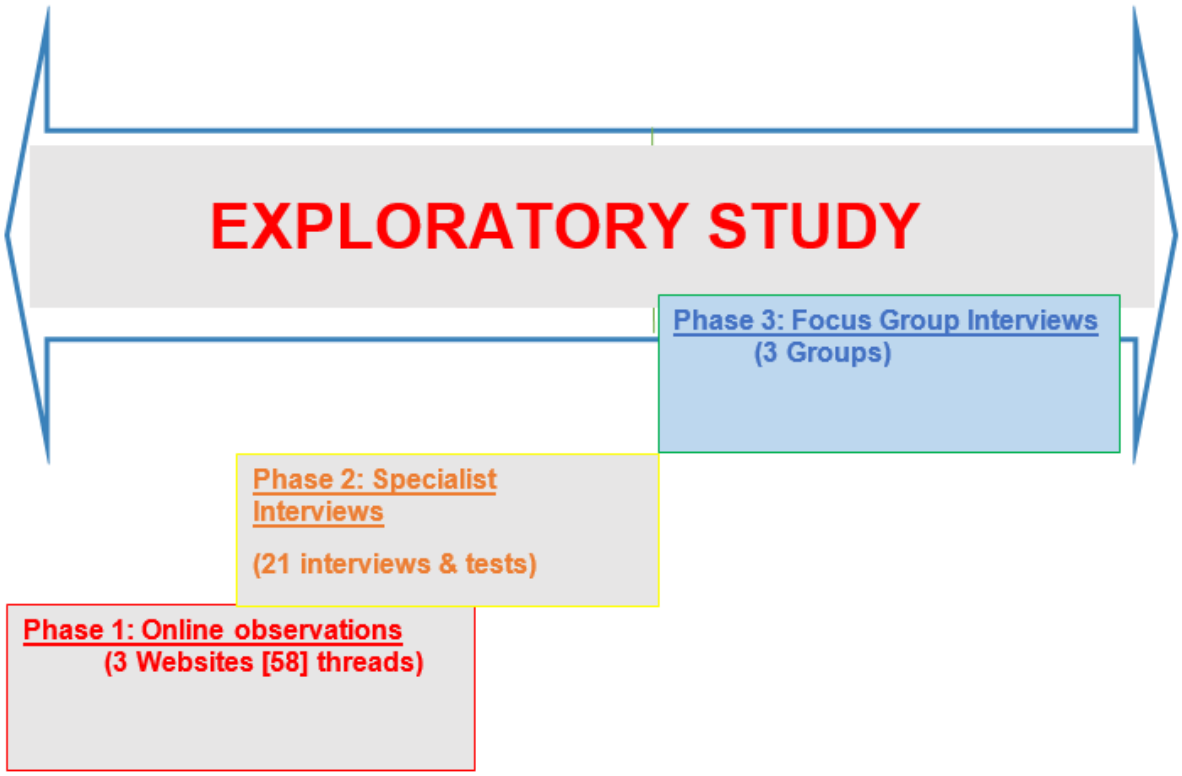
As illustrated in his research phase was guided by the above stages. Before Entrée, the initial research questions are noted on the observation sheet. Secondly, blogs and forums were available on identified websites where select threads were followed and recorded. In addition, each thread was clearly stated on the observation sheet. Initially stating with manual data analysis to immerse and familiarise with the findings, the overwhelming amount of data forced the researcher to switch to software (NVivo). Therefore, NVivo 11 was used for the remainder of the data analysis process as recommended by Kozinets (1997, 2002, 2010, and 2015) and Bryman (2016). Furthermore, this study was guided by ethical recommendations of Kozinets (2015) and the British Psychological Society (BPS, 2014). Following on from this recommendation, an observation sheet (Appendix 1-Participant Profile) was created specifically for this study providing reflective notes of each observation session.

Appendix 11: Evidence of Sequential Design

As previously stated in Section 4.3.1, a sequential multi method approach was be used for data collection as it offers depth in explanation (Creswell, 2014). Saunders et al., (2016, p.166) see value of a qualitative multi-method approach in overcoming weaknesses inherent in using a single method as well as providing a richer approach to data collection and evaluation. To obtain richer insights on consumer response to LBS and how such responses depict individual lifestyles, this study incorporated three phases of research. The initial data collection phases (Phase 1 and Phase 2) were exploratory: a non-participant online observation of three technology oriented websites where members discussed use of location services was conducted followed by projective techniques (21 specialist tests and interviews). Thus, online observations sought to investigate consumer familiarity and attitudes towards LBS. Mann and Stewart (2009, p.86) credits online observations for providing explanations on how meaning is created (e.g. motives, feelings and beliefs towards LBS). Thus, use of online observations in the exploratory phase has potential to capture new unique online personalities and 'styles'. In addition, Arruda-Filho, Cabusa amd Dholakia (2014) also argues that observations (i.e. non-participant) enable the researcher to capture the spontaneous flow of information: explore 'real' consumer experiences.

As mentioned earlier, LBS are a novel area and there is paucity of in-depth narratives, experiences and research on antecedents of behaviour (e.g. response and lifestyles). It is therefore anticipated that richer insight into users lived experiences can be explored using a method (online observation) that is somewhat congruent with habits of the target audience. The second phase (specialist interviews) were designed to explore how e-lifestyles and situational decision making may influence individual consumer response as well as mapping actual consumer response patterns. (Broeckelmann, 2010) argues how cartoon tests are best suited when exploring novel services such as LBS: participants express their views more freely. In addition, by depicting typical usage situations through visuals, respondents can relate to real-life experiences (Koenigstorfer, Groeppel-Klein, Pla, 2008): richer insights into response behaviour. In the main data collection phase, semi-structured interviews (focus groups) were used to gain in-depth understanding of respondent perceptions (value and risk) as well as the role of individual factors (e.g. life stage) in influencing response. A summary of the sequential mixed method design is highlighted in this appendix (see Figure 9.1).

Figure 9.1: Summary of Sequential Design Process



Source: This Study

Exploratory Research Design

As illustrated in Figure 9.1, the study adopted an exploratory research design. Despite predictions that LBS (e.g. apps) will shape the retail landscape in the future (Iris et al., 2008: In Junglas et al., 2008), limited in-depth research has been conducted on LBS despite LBS representing a critical emergent aspect of marketing theory and practice (Mir, 2011; Lamarre, Galarneau, Boeck, 2012; Zhou, 2012). Secondly, literature (e.g. Pardamean and Sasanto, 2012) has highlighted the paucity of explanatory theory on customer awareness and response to LBS. Secondly, there is insufficient research on adoption determinants and consumer attitudes (Persaud and Azhar, 2012). Zhou (2012) specifically refers to low take up of LBS: noting the need for more empirical evidence on adoption of emerging mobile centred services. Given that LBS is a relatively new area yet to be explored, the focus of this research is mainly exploratory: seeking to establish meaning rather than measurement. After all, what is not known cannot be measured! Aaker, Kumar, Leone and Day (2013) recommend an exploratory design where little is known about some phenomena. Creswell (2013:44) states that this exploratory (qualitative research) process *"begins with assumptions and the use of interpretative/theoretical*

frameworks that inform the study of research problems addressing meanings individuals or groups ascribe to a social or human problem." Put more succinctly, Aaker et al., (2013) argue that unlike descriptive approaches which are highly structured, exploratory research methods are highly flexible, unstructured and qualitative: the research starts with a blank canvas allowing ideas, and clues to emerge:

> *"Exploratory research is used when one is seeking insights into the general nature of a problem, the possible decision alternatives, and relevant variables that need to be considered … typically, there is little prior knowledge on which to build… methods are highly flexible, unstructured, and qualitative…."* (Aaker et al., 2013, p.65)

In addition, exploratory research breaks large problem statements (Lacobucci et al., 2010) allowing clarification of concepts; identifying objectives as well as helping steer the research. This is pivotal when researching a new area (Parasuraman, Grewal and Krishnan, 2007). Lacobucci et al., (2010) summaries key uses and benefits of exploratory research as:

- Helps to formulate problems more precisely.
- To eliminate impractical ideas.

It was anticipated that use of online observations and specialist interviews (cartoon test) in the exploratory strategy of this research would enable the researcher to get a snapshot of consumer attitudes, experiences, consumer response patterns and the role of lifestyles and situational decision making. Following on from this, focus groups sought to provide richer narratives representative of various respondents. Thus, three different groups (young students; young professionals and older respondents in employment) interviewed. It was therefore anticipated that focus group interviews would provide richer description (e.g. consumer beliefs, familiarity/experiences, perceptions) and potential role of life stage in individual responses. While most extant studies on LBS, mobile marketing and lifestyles have used surveys (e.g. Mir, 2011; Zhou, 2012; Yousif, 2012) - this study will use a sequential multi method approach comprising three phases as previously stated. As far as is known, this study is the first to combine three qualitative methods of inquiry to jointly explore use of innovative mobile oriented services and emerging electronically mediated lifestyles.

Appendix 12: Observation Template and Evidence of Field Notes

Name: LBS Observation 7 February 2016

Observation Objectives

1. To investigate consumer familiarity and attitudes towards location based services in the UK.
2. To explore initial consumer experiences with location services.

Date of Access:	Duration of Observation:
22/ 02/2016	2.5 hours

Observation Number: 7 Month: February 2016

Name of Website:
Quora

Website Link:
https://www.quora.com

Threads being observed:
What are the main motivations for people using location-based networks

Key Bloggers/Contributors:

GE, EM, SM, GE, E, RK,ME,BRD

Number of Followers:

Not stated

Site Elements:

Forum seems credible and members are knowledgeable about the subject area, provide deep insights into LBS, demographic characteristics and behavioural response patterns of members. First impressions are that many people follow this site. Feelings, beliefs and

attitudes portrayed can realistically be perceived to reflect the views of the general LBS user.

Registration Page:

Users have to register as a member before they can contribute to the online conversations but the comments are available to anyone without the need to register.

Utilitarian Motives for using LBS

Focus:

Factors that motivate people to use location based advertising to satisfy needs/wants (utilitarian)

Knowledge and Experience
Focus:

Demonstration of expert knowledge of location services and networks

Hedonic Motives for using LBS

Focus:

Use for pleasure or entertainment purposes.

Feelings
Focus:

Member views of users of LBS

Privacy
Focus

Concerns over intrusion and spam/ unwanted messages.

Sample Threads

"I use a number of location-based services. Why do I do so?

1. **For serendipity around place.** When I check in I look at tips about the place I'm in. When I checked into my hotel in Paris I learned the best bakery was just around the corner, for instance.

2. **For serendipity around people.** When I check in I can see who else is checked in. Oh,

Brian Solis is staying in the same hotel I am? Send him a note and say "hey, Brian, wanna grab a coffee?" This works over and over.

3. **For serendipity around food.** I'm hungry. I open up Foodspotting and it shows me plates of food near me that I can buy.

4. **For figuring out where the action is.** Especially cool at SXSW. I check in, see all my friends are over at Maggie Mays, and I head that way.
For bragging. I checked in at the White House. On top of the Swiss Alps. And lots of other places I want to taunt my friends with. Recently I checked in with Dennis Crowley, founder of Foursquare, at the BMW Museum in Munich (here's a picture I shot of him there). Yeah Biatch, I'm at BMW and you're not, it says to my friends. That always causes some fun conversations!

6. **For letting people know I've landed.** For instance, my wife might be waiting for me. This way she'll know I've landed and should come pick me up. OK, OK, I probably will call her too, but lots of times when you travel people like to know you're in town and available to talk with.

7. **For letting people know I'm late and exactly where I am.** I use Glympse to let someone I'm meeting know I'm running late, so they can see exactly where I am and approximately when I'll be there. Very useful because they can see I'm stuck in traffic, how fast I'm going, etc. Lots of people tell me that really is cool because they know they can go get a coffee while waiting, etc.

8. **For getting a taxi.** I use Uber to hire a cab, see where they are (and they can see where I am). Etc.

9. **For remembering where you were.** What was that place I had lunch with Ashton Kutcher? I can look back through my history to see what that place was.

10. **For getting deals.** I added this after talking with Doc Searls about it. I do check out the offers in Foursquare and on Yelp to see what kinds of restaurant and other business deals are nearby.**SR**

"Nice question indeed. Assuming location based network is any online service that allow to share or use your position (share = foursquare, use = contextual search), then my typical use cases are

1. to get a more effective search experience while on the go
2. for serendipity with friends, e.g. to find who from my friends is nearby
3. for business serendipity, e.g. to become aware of people from my various business centric social graphs are nearby and facilitate synergies (e.g. in conferences).
4. to build up my location-based profile to get **personalize recommendations** from my location-based services. This is the future of location based services. A checkin = a page

visit = some info with personalization potential. Check **qype.com** (the Yelp equivalent in Europe). It is powered by likecube.com location recommendation engine and delivers personalized predictions about places you might like or identify likeminded people based on ratings, checkins and likes.

to keep up with innovation in the space" **EM**

"My feeling is that there is much more to come before we can properly answer this question. Current behaviour scratches the surface, because the services available only scratch the surface. Most services so far, and their usage motivators, are well described by others. Social, Community Good is an area under exploited by location services to date. Whilst gaming, saving money and earning bragging rights are all valid reasons to use a location based service, they're the tip of the iceberg. We're concentrating on location as a tool to address the demise of the high street, shopping communities and the david and goliath struggle between real food lovers, producers and corporations. Hopefully helping tip the balance in favour of sustainability of food supplies in the process. Furthermore, 'Showing Support' is, in many circumstances, a powerful and useful reason to check in at a place you value and want to thrive and to spread the word about. It's nice to see people humbly offering up slightly embarrassed 'Ego' admissions - but I don't think they're giving themselves credit. Human beings are intrinsically community focussed and inherently good. We may have yet to see an abundance of social location based services that address this truth, but that doesn't mean it isn't possibly the most compelling reason to use an LBS. As much as society has developed great tech and huge scale, we risk getting worse at real life interaction as we retreat to our iPads in our centrally heated comfort. Location Based Services can, and will, address this much more in the coming years, bringing people together in their communities, just as Twitter has unified Thinkers, across the globe.**SM**

"Back in 2008/9, Brightkite got a little larger than "nothing" at tech conferences. To me, their implementation of location-based check-ins made the most sense. It would automatically tell you if someone you were connected with had checked in some place near-by (within a predefined range), remember those days? That's back when LBS mattered, to me anyway. Now it's about getting faux-pats on the back via virtual mayorship of place as though that means you're "the top dog regular" at a joint, and digital badges. Ooooo.... Aaaaah. Can't say I think it's being well done these days, but whatever works. The best part about LBS is the whole "find out what others are saying", especially your friends, but ultimately I still use Yelp for that, I trust the reviews there more. I'm not a fan of gaming users. Never have been. Not even when I worked at Mahalo. I think it's petty, but it does work - and very well, I might add. Someday it'll stop working & LBS will get back to connecting people on the fly & sharing images, etc... at least one could hope."£ **GE**

"1) to show off where you are (aka bragging rights)
2) to tell your friends where you are so you can meet up (kinda similar to #1)
3) to get points and mayorships (foursquare , game mechanics)
4) to have a nice historical log off all the places you've been" **EB**

"There's also something to be said for ambient intimacy. Virtually none of my friends here in Berlin use foursquare, but many of the people i miss most in NYC do. When i see their check-ins at favourite restaurants, i feel more connected, even if i can't join them for a beer.

Oh, and I'm determined to beat some guy named Reiner out of the Mayorships at my gym,

somehow this little badge of honour is motivating me to work out for frequently. Its the feedback loop." **RK**

"I find myself using foursquare as my main location-based network for a couple of reasons:

1. **Keep my Family Posted**: I auto-post to Facebook so my wife knows where I am when she is looking for me. I typically do this on Saturdays only as I run many errands.

2. **Feed my Ego by Playing a Game**: For certain sites, I want to be mayor. What do I get out of this personally, nothing other than my competitive spirit and ego wants to own the site. I view this as a game.

3. **Keep my friends up to date**. For the same reasons Robert Scoble mentioned above, I have friends in the area, and on occasion we check in near each other and it's a great tool to coordinate getting together on a whim.

4. **I'm a Stats Hound:** I like to keep stats on just about everything and I know I need a hobby, but I like to see how often I frequent a place.

5. **Ease of use**: I have an iPhone and it's very easy to open the app, click checkin and then select the location that just was found on GPS. If the app had any more steps, I wouldn't use it." **ME**

"They are social media whores.

Actually usage hasn't expanded out of the early adopter crowd, so the answer is that the people who are using them will pretty much use anything provided that they might look cool while doing it." **BRD**

"Because most people have only been checking in (digitally) for a couple of months if that (with few exceptions), I'd say there isn't a definitive answer yet. All the reasons stated above may make sense, but none are the silver bullet as to why people "check in." A lot of people may just be experimenting with it. What's definitely happening is people check their inbound information more often (thanks to smartphones) requiring them to have more sources in order to always have something new and unread. Remember the days when you opened email on your computer and had 60 unread messages. Now that you read email almost constantly (and are smart about filters for mailing lists etc.), this probably rarely happens (or you're someone really important). Because you're constantly checking, you typically only have a couple of messages, then what do you do? No one has emailed me, well what are other people doing? You go and check your twitter and Facebook status messages. Now that status messages have become fairly routine, checking in on people's location is the new exciting thing. Because most people have only been checking in (digitally) for a couple of months if that (with few exceptions), I'd say there isn't a definitive answer yet. All the reasons stated above may make sense, but none are the silver bullet as to why people "check in." A lot of people may just be experimenting with it. What's definitely happening is people check their inbound information more often (thanks to smartphones) requiring them to have more sources in order to always have something new and unread. Remember the days when you opened email on your computer and had 60 unread

messages. Now that you read email almost constantly (and are smart about filters for mailing lists etc.), this probably rarely happens (or you're someone really important). Because you're constantly checking, you typically only have a couple of messages, then what do you do? No one has emailed me, well what are other people doing? You go and check your twitter and Facebook status messages. Now that status messages have become fairly routine, checking in on people's location is the new exciting thing. Because most people have only been checking in (digitally) for a couple of months if that (with few exceptions), I'd say there isn't a definitive answer yet. All the reasons stated above may make sense, but none are the silver bullet as to why people "check in." A lot of people may just be experimenting with it. What's definitely happening is people check their inbound information more often (thanks to smartphones) requiring them to have more sources in order to always have something new and unread. Remember the days when you opened email on your computer and had 60 unread messages. Now that you read email almost constantly (and are smart about filters for mailing lists etc.), this probably rarely happens (or you're someone really important). Because you're constantly checking, you typically only have a couple of messages, then what do you do? No one has emailed me, well what are other people doing? You go and check your twitter and Facebook status messages. Now that status messages have become fairly routine, checking in on people's location is the new exciting thing. **"A**

Reflective Notes

Focus:

Feelings

Members express mixed feelings regarding the use and users of location services. **BRD** [69 views] argues that anyone who uses these services is a social media whore [quite a rude expression and direct attack on all members- possible ploy to generate debate and draw attention to themselves- is this a hidden motive to establish their identity online given that only 69 members have viewed this members' profile/post]. **AS** [367 views- the only anonymous member encountered on the forum so far] argues that LBS have not really taken off; [assumes an authoritative stance ['Most people'- using this phrase as if speaking on behalf of the majority of people] especially 'check-in' (digitally) so at present people are motivated by the chance to experiment. furthermore, 'checkin-in' is fast becoming a routine and exciting thing to do.

Utilitarian Motives

A slight majority of members were motivated by utilitarian needs as evidenced by the reference to these needs in 9 of the references.**SR** [1.7k views-sounds American given some of the names of places referred to, such as *SXSW* and *Maggie Mays* or might have been to America and seen/visited these places] interestingly refers to both utilitarian and hedonic needs and uses the word 'serendipity' in all the 10 motives identified. The common use related motives are identified here; 'checkin-in' to find out about: place; people; food; coordinating meetings ;organising transport (e.g. using the Uber app); diary of historic and current events and finding deals (using e.g. Yelp, Foursquare). Similarly, **BE** [71 views]has combined motivesciting finding friends and a historical log as some of their motives, while **RB** [68

views] display combined motives with the only utilitarian motive one being finding friends & or places. Interestingly, **ME2** [88 views] amongst their combined motives, identifies ease of use as one of the motives for using location services. Here, the process of 'checking in' is articulated; member demonstrates how they use their' iPhone to open apps, 'check-in' and choose location with the help of GPS. Therefore, for this member, the iPhone together with the apps contribute to this experience hence this is a 'unique' motive. Whilst the majority of these members have referred to utilitarian needs on an individual level, **ME1** [194 views] refers to business serendipity: meeting people from their myriad business social groups (refers to 'social graphs') in the vicinity for example at conferences. Therefore, this is a unique motivation centred on finding 'business friends' in 'business places'. Interestingly, this member hints that when personalisation is added into the mix, this will motivate them to 'check-in'. Goes on to provide a link to a website as well as apps that have personalisation options.

Hedonic Motives

The second most referenced motives on this thread was hedonic; members indicated that they 'checked-in' for pleasure purposes. **SR** [combined motives] listed hedonic motives such as recreation (finding out where the action is); bragging [narrates how they have checked in whilst at the White House, on the Swiss Alps, checking in with the co-founder of Foursquare at the BMW museum in Munich, Germany- goes on to provide a picture of the co-founder- perhaps some form of verification given the so called 'vanity' that happens online] as one of their motives. Aligned with the motive of bragging, **BE** [71 views- combine motives (hedonic and utilitarian)] refers specifically to gaining points and Mayorships (e.g. Foursquare and game mechanics)]. An emerging pleasure oriented motive is ambient intimacy where one seeks to keep in touch with people with a level of regularity for example through Flickr- to observe what others are doing. **RK** [127 views- one of the few female members' active on this forum] is motivated by ambient intimacy, Mayorships as well as receiving badges of honour. Ego driven hedonic motives are also manifest here; **ME2**, **RB** 'check-in' to feed their ego through gaining Mayorships status as well as gaining badges/stamps. There is also references to keeping a tab on friends who happen to 'check-in' in the same area however unlike the utilitarian oriented finding friends scenario, **ME2** refers to meeting friends on a *'whim'* which when translated means freakish, fancy or passion: related to hedonic needs.

Knowledge and Experience

Some members clearly have superior knowledge and experience with location-based-networks (LBN) as evidenced by their narrative of motivations.**ME** refers specifically to how location networks work by defining how LBNs' work whereby users share via foursquare and then their usage results in contextualised search ("share=foursquare, use=contextual search). Whilst this can be seen as an appreciation of the value of LBN, other members' e.g. **SM** [121 views] argue that the current location services are still in infancy hence difficult to draw out the main motives. Similarly, **GE** [148 views]identifies when LBSs' started and moves on to contrast the pioneering services with the present LBS. sees value on LBS such as finding out what others are doing but sees no value at all in gaming and bragging where individuals attain digital badges as mayors (used the term 'top dog' to express this). Interestingly though. **GE** acknowledges the propensity of LBS to enable people to connect 'in motion' [used the word 'fly' which was then interpreted].

Social Influence

There is no doubt that social influence is very much a part of online group dynamics.**SM** [121 views] expresses that while gaming, saving money, earning bragging rights motivate people to use LBN, the future lies in social (e.g. community- good oriented apps). Social location based services are the next 'big' services; credited for unifying people. This view is endorsed by **NJ** [105 views] who admit that their choices are influenced by what friends, members' speaks authoritatively and at times *'cries out' for* attention ("... people are you listening...EASY I said"- use of capital letters to reinforce the point and perhaps to curve an authoritative voice).

Privacy and Trust

A minority of members expressed concerns over intrusion (unwanted contact) and privacy. **NJ** for example, expressed concerns that unwanted and repetitive updates from friends

Sample Screen shots

1.7k Views

I use a number of location-based services. Why do I do so?

1. **For serendipity around place.** When I check in I look at tips about the place I'm in. When I checked into my hotel in Paris I learned the best bakery was just around the corner, for instance.

2. **For serendipity around people.** When I check in I can see who else is checked in. Oh, Brian Solis is staying in the same hotel I am? Send him a note and say "hey, Brian, wanna grab a coffee?" This works over and over.

3. **For serendipity around food.** I'm hungry. I open up Foodspotting and it shows me plates of food near me that I can buy.

4. **For figuring out where the action is.** Especially cool at SXSW. I check in, see all my friends are over at Maggie Mays, and I head that way.

122 Views

My feeling is that there is much more to come before we can properly answer this question. Current behaviour scratches the surface, because the services available only scratch the surface. Most services so far, and their usage motivators, are well described by others. Social, Community Good is an area under exploited by location services to date. Whilst gaming, saving money and earning bragging rights are all valid reasons to use a location based service, they're the tip of the iceberg.

We're concentrating on location as a tool to address the demise of the high street, shopping communities and the david and goliath struggle between real food lovers, producers and corporations. Hopefully helping tip the balance in favour of sustainability of food supplies in the process.

Furthermore, 'Showing Support' is, in many circumstances, a powerful and useful reason to check in at a place you value and want to thrive and to spread the word about. It's nice to see people humbly offering up slightly embarrassed 'Ego' admissions - but I don't think they're giving themselves credit. Human beings are intrinsically community focussed and inherently good. We may have yet to see an abundance of social location based services that address this truth, but that doesn't mean it isn't possibly the most compelling reason to use an LBS.

As much as society has developed great tech and huge scale, we risk getting worse at real life interaction as we retreat to our iPads in our centrally heated comfort. Location Based Services can, and will, address this much more in the coming years, bringing people together in their communities, just as Twitter has unified Thinkers, across the globe.

195 Views

Nice question indeed. Assuming location based network is any online service that allow to share or use your position (share = foursquare, use = contextual search), then my typical use cases are

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2. for serendipity with friends, eg to find who from my friends is nearby
3. for business serendipity, eg to become aware of people from my various business centric social graphs are nearby and facilitate synergies (eg in conferences).
4. to build up my location-based profile to get **personalize recommendations** from my location-based services. This is the future of location based services. A checkin = a page visit = some info with personalization potential. Check **qype.com** (the Yelp equivalent in Europe). It is powered by likecube.com location recommendation engine and delivers personalized predictions about places you might like or identify likeminded people based on ratings, checkins and likes.
5. to keep up with innovation in the space

151 Views

Back in 2008/9, Brightkite got a little larger than "nothing" at tech conferences. To me, their implementation of location-based check-ins made the most sense. It would automatically tell you if someone you were connected with had checked in some place near-by (within a predefined range), remember those days? That's back when LBS mattered, to me anyway. Now it's about getting faux-pats on the back via virtual mayorship of place as though that means you're "the top dog regular" at a joint, and digital badges. Ooooo.... Aaaaah. Can't say I think it's being well done these days, but whatever works.

The best part about LBS is the whole "find out what others are saying", especially your friends, but ultimately I still use Yelp for that, I trust the reviews there more.

I'm not a fan of gaming users. Never have been. Not even when I worked at Mahalo. I think it's petty, but it does work - and very well, I might add. Someday it'll stop working & LBS will get back to connecting people on the fly & sharing images, etc... at least one could hope.

72 Views

1) to show off where you are (aka bragging rights)
2) to tell your friends where you are so you can meet up (kinda similar to #1)
3) to get points and mayorships (foursquare , game mechanics)
4) to have a nice historical log off all the places you've been

128 views

there's also something to be said for ambient intimacy. Virtually none of my friends here in Berlin use foursquare, but many of the people i miss most in NYC do. When i see their check-ins at favorite restaurants, i feel more connected, even if i can't join them for a beer.

Oh, and i'm determined to beat some guy named Reiner out of the mayorship at my gym, somehow this little badge of honor is motivating me to work out for frequently. Its the feedback loop.

89 Views

I find myself using foursquare as my main location-based network for a couple of reasons:

1. **Keep my Family Posted**: I auto-post to Facebook so my wife knows where I am when she is looking for me. I typically do this on Saturdays only as I run many errands.

2. **Feed my Ego by Playing a Game**: For certain sites, I want to be mayor. What do I get out of this personally, nothing other than my competitive spirit and ego wants to own the site. I view this as a game.

3. **Keep my friends up to date**. For the same reasons Robert Scoble mentioned above, I have friends in the area, and on occasion we check in near each other and it's a great tool to coordinate getting together on a whim.

4. **I'm a Stats Hound:** I like to keep stats on just about everything and I know I need a hobby, but I like to see how often I frequent a place.

5. **Ease of use**: I have an iPhone and it's very easy to open the app, click checkin and then select the location that just was found on GPS. If the app had any more steps, I wouldn't use it

71 Views

They are social media whores.

Actually usage hasn't expanded out of the early adopter crowd, so the answer is that the people who are using them will pretty much use anything provided that they might look cool while doing it.

368 Views

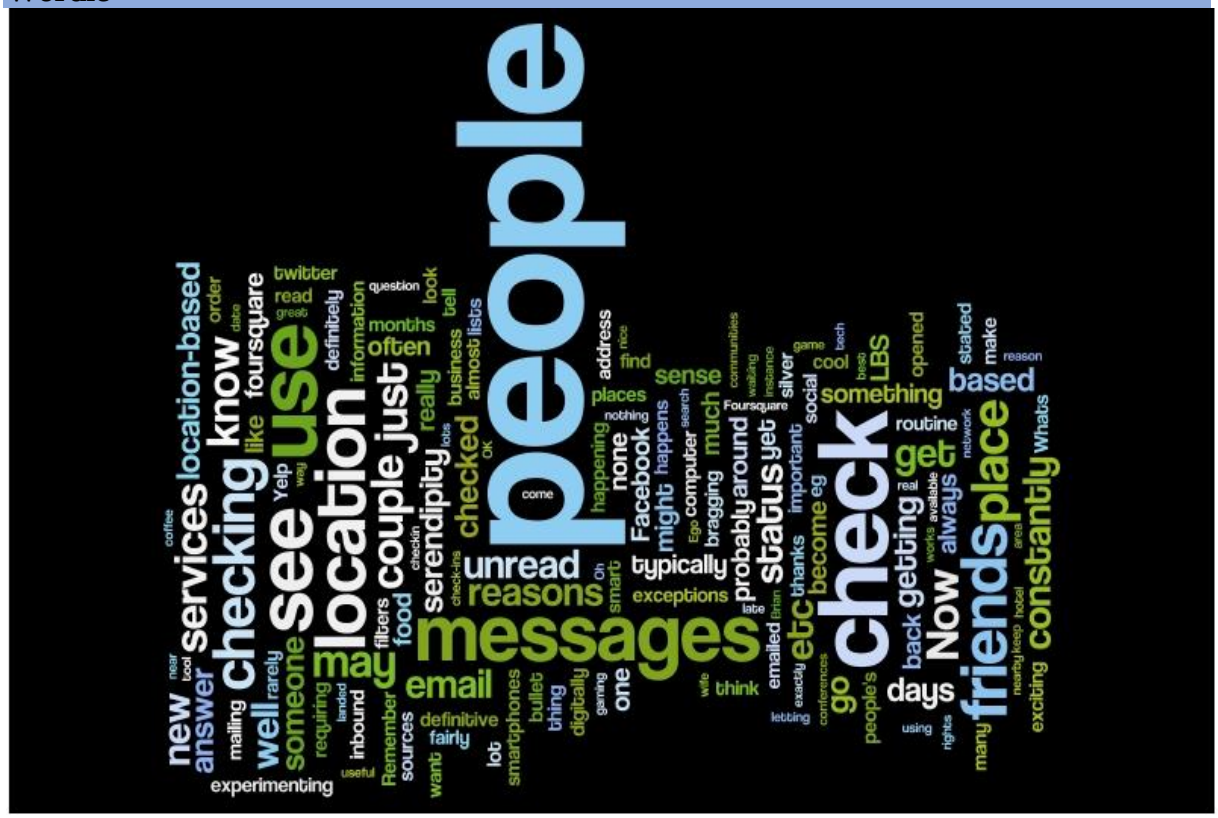
Because most people have only been checking in (digitally) for a couple of months if that (with few exceptions), I'd say there isn't a definitive answer yet. All the reasons stated above may make sense, but none are the silver bullet as to why people "check in." A lot of people may just be experimenting with it.

Whats definitely happening is people check their inbound information more often (thanks to smartphones) requiring them to have more sources in order to always have something new and unread.

Remember the days when you opened email on your computer and had 60 unread messages. Now that you read email almost constantly (and are smart about filters for mailing lists etc), this probably rarely happens (or you're someone really important). Because you're constantly checking, you typically only have a couple of messages, then what do you do?

No one has emailed me, well what are other people doing? You go and check your twitter and Facebook status messages. Now that status messages have become fairly routine, checking in on people's location is the new exciting thing.

Wordle


people
location
messages
check
use
see
friends
place
constantly
checking
know
location-based
services
unread
reasons
email
may
couple just
Now
get
based
something
Facebook
status yet
probably around
checked
serendipity
twitter
foursquare
like
Yelp
read
months
often
really
business
almost lists
information
definitely
question
look
bell
address
find
sense
places
happening
none
might
much
bragging
typically
exceptions
smart
Oh
one
think
emailed
etc
become
thanks
go
people's
days
back
getting
routine
always
many
exciting
Whats
stated
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LBS
cool
social
silver
game
bech
Foursquare
computer
Ego
eg
important
real
works
available
network
area
hotel
nearby
keep
using
rights
late
Brian
exactly
letting
conferences
wife
gaming
digitally
thing
bullet
smartphones
lot
fairly
definitive
sources
Remember
inbound
landed
requiring
rarely
well
mailing
answer
new
near
tool
experimenting
useful
want
food
fibers
check-ins
checkin
lotos
OK
come
coffee
order
date
great
nice
nothing
search
communities
waiting
instance
best

Appendix 13: Justifying Cartoon Test Method

Cartoon tests are credited for depicting a typical usage situation through visuals shown to respondents who in turn relate scenarios to real-life experiences. Respondents can project attitudes, motives and feelings (Broeckelmann, 2010) using drawn characters. Similarly, Catterall et al., (2000) cites the ability to prompt test persons to express feelings and attitudes which they would possibly withhold where methods such as surveys were employed. In addition, Koenigstorfer et al., (2008) credits the cartoon test method for delving into consumers' 'uninhibited opinions' and ideas on a research topic. Furthermore, Webb (1992: In Broeckelmann, 2010) cite ability to break the ice as well as gaining more information which is not possible using objective questioning alone. Despite these benefits, there are some potential ethical, reliability and validity issues with all projective techniques. Catterall et al., (2000:250) explain these three issues as illustrated in table 9.7:

Table 9. 7: Addressing Ethics in Cartoon Tests

• **Ethical**- ambiguous designs are used to draw on respondents' 'hidden' and 'private' experiences; a method which could be perceived to involve disguise and concealment. When used in marketing research however, Broeckelmann (2010) argues that projective techniques focus on needs of the consumer and as such respondent concerns will have been taken into consideration.
• **Validity** –how well the research truly measures what it claims to measure (Boddy, 2005) and responses may only show cultural and social awareness instead (see Yoell, 1974 and Mostyn, 1978: In Catterall et al., 2000). However, product related decisions are reflective of cultural and social symbols (Levy, 1994: In Catterall et al., 2000). Projective techniques are not entirely unreliable but are prone to poor use or unreliable scoring (Body, 2005, p.244). **Nonetheless, Konenigstorfer et al., (2008) recommends that two experts go over the results (transcripts) to enhance validity.**
• **Reliability** – Relates more to analysis and interpretation of results from projective techniques. Whilst there is consistency in responses generated, early projective techniques presented problems with inconsistent interpretation of responses (Catterall et al., 2000): different researchers had different interpretation of the same data. Lack of established validation assessment criteria for projective techniques (Rook 1988 cited in Koenigstorfer et al., 2008, p. 234) hence researchers often use aggregated scales and ambiguous stimuli relevant to the research topic. At present, however, a myriad of interpretation methods such as content analysis and interpretative analysis (e.g. semiotic analysis) aid in improving reliability. Furthermore, many respondents know very little about projective techniques and as such are curious about responses as well as interpretations thereof (Catterall et al., 2000:251). Therefore, where possible, respondents can check responses and become part of the analysis process to verify the results.

Appendix 14: Value in Focus Groups

The benefits of focus groups are extensively covered (see Bryman et al., 2015; Bryman, 2016; Creswell, 2013; Kolb, 2012; Saunders et al., 2016). Table 9.8 summarises some of the key benefits.

Table 9.8: Focus Group Benefits

Benefit	Justification
Flexibility	Open ended questions and triggers and propensity (Creswell, 2013): laddering leading to new insights.
In -depth probing of respondents	Encouraging interaction between members, synergy and spontaneity (Kolb, 2012).
The ability to combine with other techniques	Use of visuals and projective techniques (video clips and photos) to show the case being researched in action (Kolb, 2012). In this research, short video clips on LBS as well as visuals to facilitate brand mapping will be used.
Symbolic interactionism	Offers the researcher the opportunity to **explore** how individuals create meanings of the world around them (Bryman et al., 2015).

Appendix 15: Key Themes from Research Phases

Key themes emerging across the three phases of this study are illustrated in this section. We see in Table 9.9, main themes and sub-themes and these are defined and linked to literature.

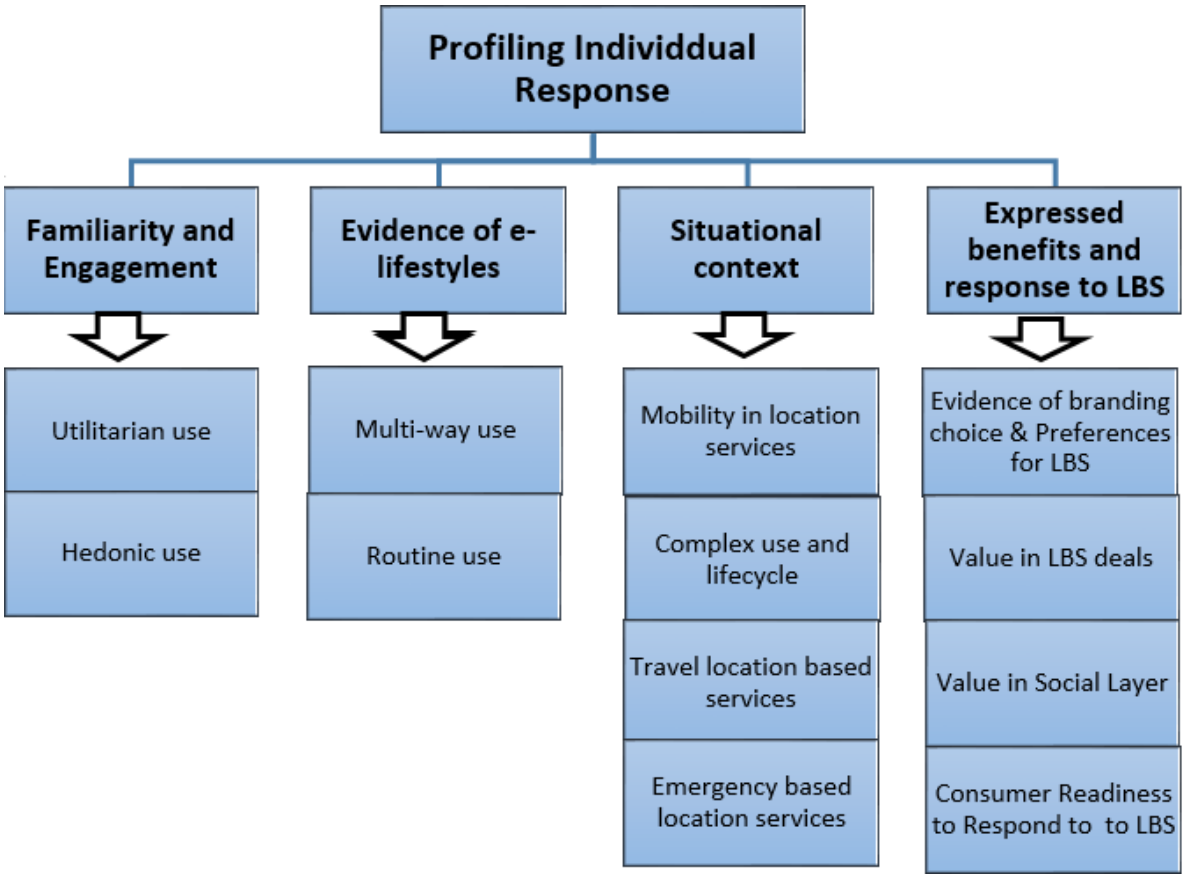
Themes & Sub themes	Definition of theme/subthemes	Related Literature
Familiarity and extent of engagement with LBS	User awareness of LBS	Mir (2011); Zhou (2012)
Use for utilitarian purposes	Simple utilitarian (i.e. making calls)	Bergmark et al., (2011); Park et al., (2013)
Use for hedonic purposes	Complex pleasure (hedonic) purposes (i.e. finding friends and networking).	Bergmark et al., (2011); Valentine et al., (2013)
Evidence of e-lifestyles	Indication of routine use of mobile devices	Yu (2011)
Multi-way use of mobile devices and Routine use of LBS	Ownership and use of more than one device (e.g. Tablet, smartphones) that link up providing access to LBS.	Sheath and Solomon (2014); Hassan et al., (2015)
Situational Context and Mobility in location services	Differences in device usage tied to specific locations (where-e.g. places of interest [physical], 'checking in' [social], on the motorway [task]). Also, looks at who uses the device (i.e. personal factors) and specific circumstances (when used).	Xu et al., (2011); Karnowski and Jandura (2014)
Complex use and lifecycle	Use that may include offline/traditional access to services as well as use of mobile devices to access LBS.	Song et al., 2012; Lee et al., (2014); Caddy (2016)
Travel location based services	Location services used when travelling	Rao et al., 2003; Bellavista et al., (2012)
Emergency based location services	Location services used in times of crisis or urgent need of help.	
Expressed benefits and response to LBS	Evidence of user motives, branding choices, preferences, value perceptions. Also, focus on trust and privacy issues.	Kucukemiroglu et al., (2007).
Preferences for LBS	Choices for different LBS	Shafi and Hasim (2014)
Value in LBS (e.g. deals and Social Layer)	Benefits derived from LBS use	Vyncke (2002)
Cautious response to LBS	User reluctance/indifference in responding to LBS.	Banejee and Dholakia (2008); Zhou (2012)
Evidence of branding elements	Brand related factors evident in individual consumer response	Xu et al., (2009); Xu et al., (2011)
		Hassan et al., (2011); Chen et al., (2014)

Table 9 9: Key Themes that emerged from three Phases of Study

Appendix 16: Outline of LBS User Response and Coding Process

In this appendix, an outline of preliminary response patterns and emerging e-lifestyles are illustrated. In addition, the breakdown of themes indicates the coding process: how the codes emerged from the data as well as unitisation of codes into main themes (See Figure 9.2).

Figure 9. 2: LBS Users' Response Behaviour and Emerging Lifestyles



Source: This Study